Lectures
ON
DYSPNŒA.

Delivered at the Royal College of Physicians,

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LECTURE I. (*Concluded.*)

EFFICIENT, easy, and pleasurable respiration, then, depends upon the maintenance of the normal proportion between the blood and air supplied to the lungs, and upon the absolute as well as relative quantity in which these two fluids are constantly renovated. Any derangement of these proportions at once produces *dyspnœa*. Moreover, normal respiration is characterized by a certain standard of five conditions—

I. A CERTAIN RANGE OF MOVEMENT;
II. A CERTAIN LENGTH OF RESPIRATORY INTERVAL;
III. A CERTAIN RATIO OF INSPIRATION, EXPIRATION, AND REST;
IV. CERTAIN ACTIVE MOVING POWERS; AND
V. A CERTAIN SENSATION;—

and whenever the normal proportion, absolute or relative, of the air and blood in the lungs becones deranged, and dyspnœa thereby produced, the healthy standard of these five conditions becomes disturbed. Indeed, it is in these disturbances that dyspnœa essentially consists. One may be disturbed, or all may be disturbed, or any of the five in any combinations and in various ways; and the varieties of these disturbances are characteristic of the different forms of dyspnœa (that is, of the different ways in which the normal proportion of the blood and air in the lungs is deranged, or their freedom of access to the lungs impeded). But since these five conditions are the only circumstances of normal respiration, their disturbances are the only circumstances of diseased respiration—that is, of dyspnœa. Let us, then, just momentarily glance at what these conditions are in health, that we may the better see how dyspnœa modifies them.

The *range of movement*, including, that is, the whole of the parietes—in other words, the varying capacity of the chest—is of course represented by the amount of air changed at each respiration: indeed, in no other way could the aggregate amount of movement of every part of the chest-wall be estimated. Of this the most divergent estimates have been made, and it is manifest that to fix a precise and accurate standard would be not only difficult but impossible, and that the most that can be done is to arrive at an approximate average. It is certain that the same individual breathes a very different amount of air under different circumstances, under the influence of exercise and rest, of sleeping and waking, &c.; it is certain that different individuals breathe a different amount under the same circumstances; it is certain that age makes a great difference, and sex a great difference, and size a great difference. And this is how it is that the observations of observers on this subject are so discrepant—"they all are right and all are wrong." Vierordt states that he found the amount of air expired at each respiration of ordinary breathing to vary, at different times, in his own person, in the proportion of 1 to 4·75, and that, on the average, it was 30·9 cubic inches. I find, however, that he elsewhere gives a lower estimate. He calculates that he respires 368 cubic inches of air per minute. Now, at the rate of 20 respirations per minute, this would be 18¼ cubic inches at each respiration, or at 16 respirations a minute it would not be more than 23. Valentin gives an estimate undoubtedly too high—of 40 cubic inches; but I find that he, too, like Vierordt, when calculating for the breathing of a longer time, gives a much lower estimate. He found that he breathed 28,681 cubic inches in an hour, which is about 24 cubic inches at each respiration. Herbst, in Meckel's Archiv, gives from 24 to 30 cubic inches. Dalton, from experiments on himself, came to the conclusion that he breathed out 30 cubic inches at each expiration. Dr. Edward Smith, in experiments on his own person, comes to a similar result. Jeffreys, in his work on the Physics of Respiration, gives a range of from 16 to 40 cubic inches, and an average of 26. Mr. Coathupe fixes the average standard at 16 cubic inches. Thompson, in his Animal Chemistry, gives the same. Dumas also gives 16, as near as possible; and Allen and Pepys 16¼. We have thus four high authorities coinciding at 16 inches. Of these different estimates I am inclined to believe that the last and lower ones are the nearest to the truth, because in the conscious respiration, when observations are being taken, the tendency is to breathe exaggeratedly—too quick and too deep. The interference of the will with the function disturbs the natural rhythm, and produces a sort of spurious dyspnœa, and then there immediately arises a certain amount of the breathing of dyspnœa—a respiration abnormally hurried and deep.

The *length of the respiratory interval*—in other words, the number of respirations a minute—is a point upon which the opinions of authors are less divergent; partly, I have no doubt, because there is really a greater uniformity in different individuals, and partly because, it being possible to take the observations without the patient's knowledge, and requiring no instrument for the purpose, the natural rhythm is not interfered with. Doubtless the circumstance that most affects the number of respirations, in individuals in perfect health, is age. Quételet has constructed a table on this basis, and shown that between the ages of fifteen and twenty, 20 respirations are made in a minute; between twenty and twenty-five, 18·7; and between twenty-five and thirty, 16. In 1714 adults, whose respirations were recorded by Mr. Hutcheson, by far the greatest number made 20. Dalton found the number of his respirations to be 20; Allen and Pepys, 19; Magendie, 15. From a great many observations made upon my own person, I find that, when breathing perfectly tranquilly in the sitting posture, I make 16 respirations a minute; 16 appears to be about the average of Dr. E. Smith's observations; and I find that my friend Dr. Sibson, observing on his own person, states that he makes 16 respirations a minute when in a state of rest.

The ratio of the three parts of each respiratory act—*inspiration*, *expiration*, and *rest*—is perhaps the most difficult subject of all to determine: partly from the difficulty of checking off the respiratory movements, and saying where one begins and the other ends—of saying what is rest and what is movement, and precisely where one passes into the other; but chiefly because there really is no fixed standard at all. The proportion of the three parts of each respiratory act varies with every varying condition of the body. There may be twenty different ratios, and all of them normal; and that which is normal for one would not be normal for another. In the normal respiration of rest the inspiration is long; in the normal respiration of exertion the inspiration is short. In rest the pause is long; in sleep it is often very prolonged; in exercise it is lost: and all three ratios are normal. All that can be said, then, is that in a given state we have a certain ratio: the ratio must always be relative. The state that I take as a standard is that *of* an adult male in a state of rest, awake, and in the sitting posture; and I find it to be, dividing the whole respiratory interval into nine parts, four for the inspiration, two for the expiration, and three for the pause, or thereabouts.

The *active moving powers* of respiration are of a mixed nature, partly vital and partly physical—partly consisting of nervous and muscular force, and partly of elastic recoil, with a small element of gravitation. As there is nothing on which a correct interpretation of the phenomena of dyspnœa depends so much as upon a clear knowledge of the moving powers of healthy respiration, I shall endeavour to make this part of my subject as plain as possible.

I will start at a condition of expiration, and will for the present assume, what I shall presently prove, that the state of the chest at the end of an expiration, prior to the next inspiration, is an equilibrium of two forces—that of the elasticity of the lung tending still further to reduce the capacity of the chest, and that of the chest-walls refusing to be any further drawn in, and tending to assume a capacity slightly greater than that to which the elasticity of the lung has reduced the thoracic cavity. From this state of passive balance the chest-walls are raised by the action of the muscles of inspiration the moment there is a demand for a fresh supply of air. The action of the inspiratory muscles thus comes in as a third force to disturb the equilibrium of two previously existing forces. Just at starting it has the elasticity of the lungs against it, and the elasticity of the parietes acting *with* it; but a very slight de-

gree of enlargement carries the ribs to that point which they would themselves be disposed to reach and rest at, and would reach, if liberated at any time from the contracting tendency of the lung; and beyond that point the muscular inspiratory action has two forces arrayed against it—that of the chest-wall and that of the lung—both resisting, and with a rapidly increasing ratio, the inspiratory distension of the chest. It is against these two forces that every cubic inch of increased capacity is gained. What is the exact ratio of their increase, as inspiration advances, has never been ascertained, and would be a problem of very difficult solution. But two things I think are certain—one, that the ratio of the increase of the resistance of the parietes is much greater than that of the resistance of the lungs; for while inspiration starts with no resistance from the parietes (while that of the lungs already exists), there can be no doubt that towards the end of inspiration this is the great force that it has to antagonize, and that in extreme inspiration brings the further enlargement of the chest to a stop. The other thing certain is, that the ratio of the increase of muscular exertion called into activity, and necessitated as inspiration advances, must be equal to the sum of these two increasing ratios of opposition—the increasing ratio of the resistance of the lung *plus* the increasing ratio of the resistance of the chest-wall.

What I have just now said applies only to the costal parietes of the chest. But, in the meantime, what has been going on at the diaphragm? It has been descending, by the flattening of its vault, in opposition to two elastic forces acting on its opposite surfaces—the elasticity of the lungs exercising a traction on its upper surface, and the elasticity of the abdominal contents and abdominal walls exercising a pressure on its under surface. It is then here, as on the costal surface, a case of muscular contractility *versus* elastic resistance. But there are these two points of difference—first, that the two elastic resistances, that of the lungs and of the abdomen, act all along, from the very beginning, in the same direction, and not, like that of the ribs, first concurrently and then antagonistically; and secondly, that the elastic resistance accumulates much less rapidly on the phrenic than on the costal surface of the chest: the resistance of the lung is, of course, the same, but the elastic resistance of the abdominal contents and walls increases at a far less rapid ratio than that of the ribs.

The expansion of the chest-walls, then, and the descent of the diaphragm, having increased the capacity of the chest to the required amount and relieved that state of things that necessitated and prompted the inspiration, muscular action stops, and the walls of the chest are handed over to the unopposed sway of the elastic forces that have contested every inch of inspiratory enlargement. These forces immediately bring back the walls of the chest to the state from which inspiration had previously disturbed them: the elastic ribs, freed from the action of the inspiratory muscles, recoil; the elastic contents and walls of the abdominal cavity, freed from the downward pressure of the diaphragm, deal back the force they have received, and thrust it up again; while the elastic lung exercises a traction on the entire thoracic surface, costal and diaphragmatic, and assists the other two elastic forces in bringing things back to their original state. The great fact to be learned from all this, and that which gives it so much importance in relation to dyspnœa, is, *that inspiration is an* OPPOSED, *and expiration an* UNOPPOSED *action*—inspiration a contest between two oppositely acting forces of which one is the stronger, and expiration the action of forces all concurrent. It will be seen, by-and-by, how much of the phenomena both of healthy breathing and dyspnœa this fact will explain.

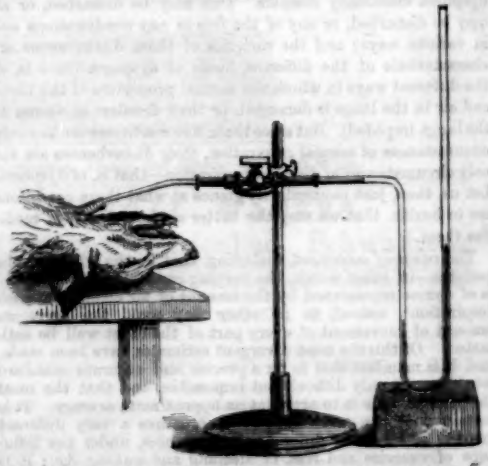
If I would be accurate, I must not omit to mention the part that gravitation plays in respiration. It is not an important force, but still it *must act*, and therefore in a critical examination should be taken into account. The weight of the costal parietes must always tell against inspiration, in any position of the body (except the prone position), whether standing or lying; for the raising of the ribs in either position is against gravitation. But whether the weight of the *abdominal* contents shall favour expiration or inspiration will depend entirely on the position of the body: for in the horizontal position it will oppose the descent of the diaphragm in inspiration, and help to thrust it up in expiration; while in the standing position it will favour the descent of the diaphragm, and diminish the forces that thrust it back in expiration. Thus, as far as the abdominal contents go, gravitation is an inspiratory force standing, an expiratory force lying.

Lastly, if I would be very critical, I must say a word on the state of atmospheric pressure in inspiration and expiration. In inspiration the intra-thoracic air is in a state of *minus* tension, and in expiration of *plus* tension: in both cases, therefore, the moving parietes find a greater force in front of them than behind them; in fact, the disturbed pressure is the consequence of the movement. But as it acts equally in both directions, and can therefore be regarded neither as an inspiratory nor expiratory force, and is infinitesimally small, it may be disregarded as a factor of the respiratory forces.

I said just now that the condition of things at the post-expiratory pause was an equilibrium of two opposing elasticities. What proof have we of that? The proof of necessity: it *must* be so; the forces are there, and they cannot but act. The elastic contractility of the lung—its tendency to assume a diminished volume—is a tendency that the deepest expiration during life never satisfies. A healthy lung, the moment it is relieved from the traction of the thoracic walls by the admission of air into the pleural cavity, collapses to a size that the most forced expiration could never reduce the capacity of the chest to. This I may show you in a moment. The lungs of this dog, which has just been killed, at the present time exactly fill his chest. I will now open the chest and admit air into the pleural cavity. The moment I do so, you see the lungs shrivel up into little organs attached to the mediastinum, not a quarter filling the cavity they before completely occupied. This collapse of the lung, I need not tell you, does not depend on an excess of pressure on its external surface, for there is the same atmospheric pressure within it; but on its being released from the traction which the walls of the chest had exercised upon its outer surface by virtue of the vacuum existing between them.

What is the amount of this force? Carson, in experiments on calves, sheep, and large dogs, estimates the resiliency of the lungs to be equal to the support of a column of water of a foot to a foot and a half in height, and in rabbits and cats to a column of water varying in height from six to ten inches. I have here an arrangement for estimating it. (Fig. 2.) The

FIG. 2.



apparatus consists simply of a bent glass tube, in the shape of an inverted syphon, fastened to a horizontal brass tube furnished with a stopcock. The lower part—i. e., the bend—of the glass tube is now filled with some coloured fluid, to the height of about four inches in each arm. The brass tube is securely tied into the windpipe of a dog that has been recently killed, and, the height of the fluid in each of the arms being exactly equal, the stopcock is shut. I now open the dog's chest so as to allow the free access of air to both pleural cavities. As long as the stopcock is shut no collapse of the lungs takes place, because no air can escape; but the moment I turn the stopcock the lung slightly collapses, as you see, down goes the fluid in the proximal tube and ascends equally, of course, in the distal; the difference between the two, in other words the height of the column of fluid, showing the amount of contractile force that the lung exercises, because it shows the height of a column of fluid that that elasticity is adequate to sustain. The height of the column of fluid thus supported is, in this experiment, as you see, about four inches.

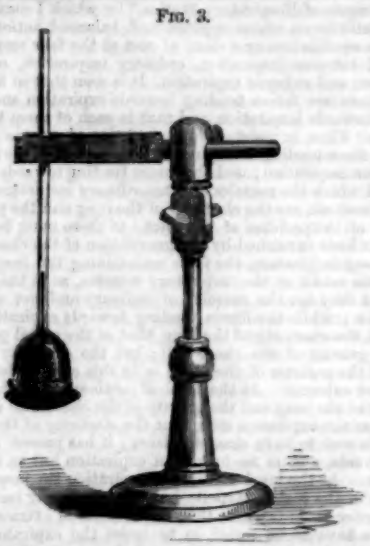
Since, then, this elastic contractility of the lung is always drawing on the inner surface of the chest, it is manifest that

when the ribs have subsided to the exact point that of themselves they would be disposed to stop at, they are carried a little further, and only stop when the lungs have drawn them so far beyond their own proper point of rest that the force of recoil thereby generated is exactly equal to the contractility of the lung. Then they stop. Thus it is evident that what I said just now must be true, that the state of things at the post-expiratory rest is a state of equilibrium of the two forces—that of the lung tending still further to draw the chest in, and that of the ribs tending to rise a little by virtue of having been drawn in by the lung beyond their own proper point of equilibrium.

I may now relate to you an experiment that unequivocally proves this to be the case. If the proposition I have just stated is correct, if the constantly-acting contractility of the lung draws the ribs in a little further on the expiration side than is their natural point of rest, it is evident that when the costal parietes are released from the lung by the admission of air into the pleural cavity the ribs ought suddenly to rise. This I have long thought I have observed. I have long thought, when I have been watching post-mortem examinations, that at the moment the cavity of the chest is opened a slight sudden rise takes place in the ribs, and the air rushes in with a short audible whiff. But it was only the other day that I obtained positive proof that such was the case. With the view of ascertaining whether there was any rise under these circumstances or not, it was of course desirable to employ some instrument delicately perceptive and indicative of the slightest movement. Such an instrument I show you here. It consists of a capillary glass tube, dilated at its inferior extremity into a bell-shaped orifice. Over this is tied a piece of sheet caoutchouc, and such a quantity of a coloured fluid is poured in as to fill the bell and rise an inch or two up the tube. The weight of the fluid within the bell-shaped extremity of the tube slightly bulges the caoutchouc, and gives its outline a slight convexity, very convenient for the contact of anything pressed against it. It is manifest that such an instrument must be a very delicate indicator of small amounts of movement, as the motion of anything placed in contact with the caoutchouc surface will be multiplied in the tube by as much as the surface pressed upon is greater than the capillary column of fluid in the tube; so that if the superficies of caoutchouc in contact with the moving body is a hundred times as great as the area of the capillary column of fluid, for every fiftieth of an inch of movement the fluid would rise two inches. In the employment of this instrument it is essential for a satisfactory result that it should be perfectly immovable, and the body on which the observation is being taken perfectly still also. To secure the immobility of the instrument I fixed it vertically in a horizontal arm projecting from a firm and weighted stand, as I now show it to you. (Fig. 3.) This arm moves up and down the rod of the stand, and is fixed by a screw, and thus I am able to bring the instrument exactly over, and in exact contact with, the body whose movements are to be examined.

It was only a day or two ago that I had this instrument ready for an observation; and not having a post-mortem examination at my own hospital on that day, I am indebted to Dr. Andrews, of St. Bartholomew's Hospital, for affording me an opportunity of testing it, and ascertaining the fact I wished it to prove. I

FIG. 3.



made the experiment in the presence of the house-surgeon of St. Bartholomew's and many of the students. The subject was a man who had been killed by some accident only a few hours before, when in perfect health. The integuments of the chest were removed, and everything made ready for opening it. The sensitive surface of the instrument was then brought over the cartilage of the third rib, near its sternal extremity, and lowered till it came in light but fixed contact with it; it was then screwed tightly in that position. The fluid now stood at exactly two inches. The cartilage of the rib was now divided just on the outside of the instrument, but, to my surprise, no rise took place—the fluid stood exactly where it did before. The reason of this, however, soon became manifest. The rib had been divided, but the pleural cavity had not been opened; for on carrying the incision deeper, at the moment the pleura was cut into, the air was heard to rush in with an audible whiff, and an instantaneous rise of the fluid, of exactly one inch, took place at the same moment. The instrument had stood at exactly two inches; it now stood at exactly three; from this it did not afterwards move.

This experiment proved more than I had contemplated. It not only proved the rise of the thoracic walls when the chest is opened, but it proved that this rise is not in any degree dependent on the straightening of the particular rib cut, but on the entrance of the air; for on the section of the rib there was *no* rise; the rise was coincident with the opening of the pleural cavity.

In illustration of what I have just been saying with regard to the forces concerned in respiration, let me direct your attention to this Table. It sets forth what I have called the

TABLE I.

CO-EFFICIENTS OF RESPIRATORY STATICS.

At level of	*Forces tending to Expiration.*	Equilibrium.	*Forces tending to Inspiration.*
Extreme Inspiration	Elasticity of Lung. Physical Reaction of Parietes. Gravitation of Chest-wall.	Extreme.	Muscles of extraordinary Inspiration.
Ordinary Inspiration	Elasticity of Lung. " Parietes. Gravity of Chest-wall.		Muscles of ordinary Inspiration.
Ordinary Expiration	Elasticity of Lung. Gravity of Chest-wall.		Elasticity of Costal Parietes.
Extreme Expiration	Elasticity of Lung. Gravity of Chest-wall. Muscles of extraordinary Expiration.		Elasticity of Costal Parietes. *Extreme.*

"Co-efficients of Respiratory Statics," by which I mean those antagonistic forces whose opposed and balanced action would maintain equilibrium or a state of rest at the four respiratory levels of extreme inspiration, ordinary inspiration, ordinary expiration, and extreme expiration. It is seen that in all these states there are forces tending towards expiration and forces tending towards inspiration, and that in each of them they are different. Thus, in maintaining a condition of *extreme* inspiration, the force tending to inspiration is the action of the muscles of extreme inspiration; and the forces tending towards expiration, and which the muscles of extraordinary inspiration have to keep in check, are the elasticity of the lung and the physical reaction of the parietes of the chest: to these must be added the slight force furnished by the gravitation of the chest-wall. At *ordinary* inspiration, the force maintaining the inspiratory state is the action of the inspiratory muscles, as in the former case; but they are the muscles of ordinary and not extreme inspiration; while the forces tending towards expiration are, as before, the elasticity of the lung, that of the costal parietes, and the gravity of the chest-wall; but the elasticity of the lung and the parietes of the chest is in this case moderate, in the former extreme. At the level of *ordinary* expiration the elasticity of the lung and the gravity of the chest-wall are still arrayed on the expiration side. But the elasticity of the costal parietes is seen to have changed places; it has passed over to the other side, and is no longer an expiration but an inspiration force. At the level of *extreme* expiration the inspiratory tendency of the costal elasticity has become greatly increased; and in order to antagonize this, the muscles of extraordinary expiration have to be called in to assist the expiratory tendency of the lung's contractility and the gravitation of the chest-wall. To sum up these results, and state what is the broad teaching of the Table, we find that in all states the elasticity of the lung tends towards expiration; that the elasticity of the chest-wall tends in one direction or another according to the condition of the chest, and that it always tends in the opposite direction to that in which the chest is—in the inspiration state towards expiration, and in the expiration state towards inspiration; that thus in inspiration the elasticity of the lung and that of the chest-wall act together, while in the expiratory condition of the chest they act in opposite directions; that the elastic forces tend to balance one another at a middle state, any disturbance from which can only be brought about by muscular action.

In the description I have just now given of a respiration, I have treated expiration as entirely physical, and have ignored muscular action in it altogether. Am I right in doing so? Is an ordinary tranquil expiration entirely elastic, or is it partly elastic and partly muscular? That it is mainly elastic I think the following considerations show. In the first place, the elastic forces are demonstrable, and nothing can prevent their action. And they are not only demonstrable, but measureable, as I have partly shown you. Mr. Hutchinson calculates that the muscular force necessary to overcome the elasticity of the ribs in an ordinary inspiration is equal to 100 lb., and in an extraordinary inspiration to 300 lb. An expiration after an ordinary inspiration, therefore, starts with an elastic force of 100 lb., and after an extraordinary one with a force of 300 lb., irrespective of the elasticity of the lung or of the abdominal contents and walls. Another fact which points to expiration being mainly elastic is the prolongation of it that accompanies the loss of the elastic resiliency of the lung, as in emphysema. Then, again, an inspiration is always immediately succeeded by an expiration: the chest never stops in the inspiration state. If anything throws a pause between the respirations, it is always after the expiration, and not after the inspiration, that the pause takes place; if failing power renders the respirations increasingly distant, it is the inspirations that are delayed, not the expirations—they follow the inspirations just as immediately as in the promptest breathing. The state of the chest at death is always that of expiration. The same in fainting. Then, again, one's own sensations, as far at least as I can analyse them, assert the elastic character of expiration. We *feel* as if inspiration is an action, and expiration a passion—that in inspiration we move the walls of the chest, while in expiration we "let them go." Then, lastly, the character of the two movements is consistent with the muscular character of inspiration and the elastic character of expiration: inspiration is a sustained up-hill pull, one force against another, the whole way—a gradual, sustained rise; but the moment the inspiratory muscles let go their hold, down goes the chest and up goes the diaphragm, starting with a maximum velocity at first and nearly emptying the chest at a stroke, and then gradually dying away and imperceptibly merging into rest.

The *sensation* which prompts to breathing is, I think, an infinitesimally small dose of that which by being protracted and aggravated constitutes the distress of dyspnœa; but which, I imagine, is rendered painless partly by being so faint and slightly pronounced, and partly, perhaps, by being so transient—only felt at the end of the interval of rest, and then instantly relieved. No doubt the suspension of breathing produces such an exacerbation of this feeling as very much alters its character. But let me say, in passing, that we need not seek in absolute difference of character for the explanation why a sensation may be at one time painful and at another not: hunger, for instance, which if unappeased is most distressing, becomes the very source of the pleasure of its gratification; any sensation that prompts to an action becomes painful or pleasurable according to that action's immediate sequence. And I think, as far as I can observe, that the ordinary sensation that makes us inspire is the same *in kind* as that which we feel so distressingly if we hold our breath.

Such, then,—a certain length of respiratory interval, a certain range of movement, a certain ratio of parts of the act, certain moving powers, and a certain sensation,—are the five conditions of normal respiration.

ON A CASE OF CHOLERA;

WITH REMARKS.

BY F. W. PAVY, M.D., F.R.S.,
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IN a recent number of THE LANCET attention is drawn to the prospects of an invasion of another cholera epidemic amongst us. From the reports daily appearing in the public journals from the East, public fears are already aroused, and the medical profession will be looked to to be ready to meet, and, as far as lay in its power, to cope with, the invasion. The occurrence of diarrhœa experience teaches us to look for at the present season of the year. Some of these cases assume so severe a form as to pass under the name of English cholera. They differ, however, from cases of the Asiatic disease by the presence of bile in the dejections and vomited matters, and by the absence of secondary fever should recovery from the purging and vomiting take place. Diarrhœa has now shown itself pretty severely, and, besides, cases have this year occurred which have presented the characteristic purging and vomiting of Asiatic cholera, and would have been pronounced as cases of such if the epidemic had been prevailing amongst us.

In the number of THE LANCET referred to (July 22nd) mention was made of a patient admitted into Guy's Hospital about three weeks back. This, I presume, was the case in Phillip ward, under the care of my colleague, Dr. Barlow. At the commencement of the summer season a case was admitted into the male clinical ward, under the care of Dr. Wilks, which wanted only the presence of the epidemic to make it Asiatic cholera. About a week ago a case was admitted under my own care, the report of which will be found subjoined. In this man there was the characteristic rice-water purging and vomiting of the Asiatic disease; the violent cramps in the lower extremities; the collapse; the shrunken, pallid countenance; and the cadaveric appearance. The case rapidly yielded to the treatment that was adopted, and was afterwards unattended by consecutive fever, which is the only respect in which it differed in appearance from epidemic cholera. Sporadic cases like these show that the constitution is ripe for the outbreak and spread of the complaint should it unfortunately make an onward march towards us. To be forewarned is to be forearmed, and it behoves us to take the outbreak in Egypt and the "epidemic tension," as it is appropriately styled in the editorial article alluded to, that evidently prevails amongst us as a warning, and not allow the enemy, in the event of invasion, to surprise us. The following notes of my own case are furnished by my clinical clerk, Mr. Gill.

James P——, aged nineteen, admitted into the clinical ward July 17th, under Dr. Pavy. The patient, after feeling indisposed on the 16th, was suddenly seized on the following day with violent purging and retching. He had eaten nothing that he is aware of that would be likely to disagree with him. His motions came from him "just like water." About three

P.M. on the 17th severe cramps in the legs came on. From this time the purging, vomiting, and cramps continued incessantly till six P.M., when he was brought to the hospital and admitted.

His countenance was very anxious, his eyes sunken, his complexion of a dusky hue, his voice feeble, and his skin and breath cold. No pulse was to be perceived at the wrist. His bowels had continued acting whilst being brought to the hospital in a cab. His motions were of a rice-water character, containing shreds of mucus, and giving an alkaline reaction. The vomited matter presented the same appearance as that passed from the bowels. The cramps in his legs were exceedingly severe. Thirst was excessive, and no urine had been passed for some hours.

He was at once put into bed. Friction was applied to the legs, and hot-water bottles placed at his feet. He was ordered to take twenty minims of chloric ether with ten minims of laudanum in an ounce of water every two hours. He was also ordered a drachm of bicarbonate of potash with ten ounces of water as a beverage, and six ounces of brandy. He soon became rather drowsy, and the purging diminished, but the vomiting continued. About eight o'clock in the evening his cramps left him, and his pulse returned. He passed a tranquil night, and the alvine evacuations in the morning presented a fæcal character.

From this time he made a rapid recovery, and on July 25th was well enough to be discharged from the hospital.

Bedford-place, July 27th, 1865.

A CASE OF

STRICTURE OF THE ŒSOPHAGUS, PRODUCED BY SULPHURIC ACID, OF THIRTY YEARS' DURATION, COMPLETELY CURED BY BOUGIES.

BY JOSEPH STEAD, ESQ., M.R.C.S., &c.

ABOUT the end of November, 1862, I was requested by my friend Dr. Blunt, of Birmingham, to visit a gentleman in Manchester who had consulted the doctor about an extreme difficulty of swallowing, under which he had for many years laboured, with a view to the commencement of a cautious attempt to relieve him by means of bougies. Mr. ——, a highly respectable merchant, thirty-three years of age, gave me the following history of his case:—

When a child three years old he managed to reach some sulphuric acid from the ledge of the kitchen window, which he poured into a glass, added a little water, and then attempted to drink. He has some sort of recollection of lying on the sofa afterwards in pain, and being dosed by two doctors with magnesia. For six months subsequently to this untoward accident he lived almost entirely upon arrowroot; his progress towards recovery was exceedingly slow, and he became subject to frequent attacks resembling croup. As he advanced from childhood to youth the power of swallowing improved a good deal, until, at the age of eleven, his principal complaint was the rather frequent occurrence of "choking fits," if he ventured to attempt to swallow too large a piece of meat. He was, however, allowed to go to a boarding-school, where for two years he took his meals with the other boys, only occasionally having to leave the table when a piece of meat stuck in his throat, and compelled him either to cough it up or force it down by pressing upon the gullet. "One Sunday the lads had their usual dinner of boiled mutton, and he had to retire in haste as above described. He went to the outside of the building, and resorted to all those means he was accustomed to employ, but the piece of meat obstinately refused to pass; and his efforts having been prolonged far beyond the usual time, he became alarmed, and hurried to acquaint the governor." To the alarm of this gentleman and the medical officer, he remained for forty-eight hours quite unable to swallow even water. He was removed to Manchester in a state of the greatest prostration, from which he rallied very slowly. He has never regained, to this day, the limited power of swallowing which he possessed at school.

During the next two years he was under the treatment of Mr. Roberton of Manchester, by whom bougies were used; but he seems to have arrived at the conclusion that the disease was merely nervous dysphagia, and to have expressed that opinion to Sir Benjamin Brodie, to whom in 1844 my patient, then a boy of fourteen or fifteen years of age, was taken by his father. Sir Benjamin tried to pass several bougies, and failed. He said very little, but told them, in brief terms, that "the disease was too low down, and that nothing could be done for it." He wrote, however, a letter to Mr. Roberton, which is in my possession, and in which he states that, "after a very careful inquiry into the present circumstances and previous history of his patient, he is led to the conclusion that there is some actual mechanical obstruction in the superior part of the œsophagus." He then proceeds to assign various reasons against the opinion entertained by Mr. Roberton, one of which is, "the application of the thumb to the throat, which the patient seems unconsciously to make with a view to help his swallowing; and this," he says, "is what I have not observed in cases of hysteria, and is like what might be expected to occur in a case of real mechanical obstruction. Moreover," writes Sir Benjamin, "I have not been successful any more than you have in passing a bougie into the œsophagus. I have tried several bougies, large and small, and they all *stop at the same place*. But what," he asks, "is to be done? I am afraid of recommending the use of bougies; for, first, even if passed through the obstruction, I do not think they would do any good; and, secondly, it is not at all improbable that, if any force were employed in using them, they would do great injury." The patient is therefore "to be careful in his diet, not eating his meals in a hurry, swallowing only those articles which he can swallow easily, and to do nothing further. By avoiding all causes of irritation, it may be that the obstruction may gradually improve of itself. I really believe that this is the best advice which can be given him."

And so, the most sagacious and philosophical surgeon of the day having pronounced the case beyond the reach of surgical skill, my patient has reconciled himself to his hard fate ever since the day he consulted him. For twenty years, surrounded by everything that wealth could procure, he has had to bear, as best he might, his scanty fare, his solitary meals, the appetite to eat far more and far other than he had the power to swallow—aye, and the pangs of hunger! "I have known what it is to be hungry many a time; indeed," he tells me, "I have got almost, I may say, used to that." For many of these years he took his meals alone; afraid of choking, afraid of being seen to eat, afraid of being watched as he lingered over a meal long after others had done. Eggs formed the staple of his diet, and he generally took four or five a day, with bread-and-butter cut extremely thin; the bread itself being specially prepared for him, of a very fine and crumbling sort. He could not swallow ordinary bread. He also took arrowroot, jelly, rice-pudding, and milk. But all had to be prepared for him with the greatest care, and even then could not always be taken without great straining and pressing upon the throat. He tells me that a small bit in his arrowroot would create much irritation, and would be certain to come back on his tongue unswallowed. During the last four years he has taken to fragments of very finely potted beef, and washing them down with beef-tea.

In this truly pitiable condition my friend Dr. Blunt was consulted; and to him must in all fairness be ascribed the credit of having at once pointed out, and firmly and decidedly advocated, the true means of rescue, and so thrown open once more the gates of hope to this unfortunate gentleman. "Finding the pharynx uninjured, and the patient suffering from a constriction of the œsophagus situated below the cricoid cartilage, without any complication of any kind," Dr. Blunt confidently recommended him to have an attempt made to cure him by means of bougies; and, in reply to the objections of Sir Benj. Brodie to this twenty years ago, held that "no man could say that such treatment would be useless until after he had introduced a bougie within the strictured portion."

I find my patient a delicate-looking young man, with a very pale and thin face, a weak and sepulchral voice, and very narrow across the chest. His muscles are soft, flabby, and ill-developed; and altogether he is in very poor condition. He has a quiet, subdued, and ill-used look, which it is difficult to describe, but very sad to see, and which only too plainly seems to bear witness to the long silent struggle he has had to live. I saw him drink a part of a glass of water this morning (Dec. 1st, 1862), which he did very slowly, holding each successive mouthful a little time in his mouth, and swallowing it in divided portions. I also got him to eat a little piece of his crumbly bread, which was kept long in the mouth, and two or three separate acts of deglutition occurred before it was gone;

and the thumb went instinctively to the throat, just as Sir Benjamin Brodie described.

Dec. 4th, 1862.—In company with a surgical friend, I attempted to pass œsophageal bougie No. 1. It went down a little below the cricoid cartilage, and then bent and would go no further. My companion tried with exactly similar results. In anticipation of failure, I had provided myself with an elastic catheter of small size, which I carefully passed down to the obstruction; but no further could I get. As far as I could tell, *allowing for the bending of these instruments*, they were arrested by a stricture about seven inches down—measuring, that is, from the upper lip pressed against the gum. Each introduction was followed by the slow "welling up" of large mouthfuls of viscid fluid.

12th.—No ill effects having followed the attempt just described, I, in company with my friend, gave the patient chloroform, and repeated the operations of the 4th many times; but with no different result. My friend in particular introduced a stiffish little catheter, and passed it against the hard, solid stricture. A peculiar slow welling up of mouthfuls of fluid accompanied each introduction, and continued after the patient came round from the chloroform. My surgical *confrère* now very plainly told me that there was nothing for us to do but confess to "a failure;" that Sir Benjamin Brodie was right; and that, for his part, he would rather withdraw from a case any further surgical interference with which would make matters worse, or even cost the patient his life.

22nd.—The patient felt a slight soreness for a few hours after the rather rough usage of the 12th; but no increased difficulty in swallowing. He has met with Dr. Blunt accidentally in Leamington, and has received encouragement from him to persevere. With a stricture so tight (and in all probability zigzag, or corkscrewy, as I think) the ordinary œsophagus bougies were clearly of no use. I wanted something made of much smaller size, of good length, and yet of sufficient stiffness to exercise pressure at the right spot without bending. I explained all this to Mr. Wm. Wood, our intelligent and obliging surgical instrument maker in Manchester; and as I wished to try first with a bougie about the size of No. 8 catheter, he suggested that I should have one made exactly of this size, *but hollow, and containing a stilette*, and as long as the ordinary œsophagus bougie.

Jan. 7th, 1863.—I find the bougie thus made everything I could wish. I easily enough passed it down to the stricture, but there it stopped. I repeated the introduction several times this morning, but with no better success. I had, however, an instrument now on which I could depend; the stilette answers its purpose capitally. The diameter of this bougie is one-sixth of an inch.

20th.—Every day, except Sundays, since my last report I have visited my patient. On most days I have passed the bougie down to the stricture, and on some of them several times during the same visit. When he has complained of soreness I have always declined to operate. We have always an inch measure at hand, and on extracting the bougie I frequently ascertain how far it has gone down. The last few mornings the measurement from the upper lip pressed against the gum has been nine inches. Without placing too much reliance on my original estimate of the depth of the stricture (seven inches)—when, it will be remembered, I was using bending instruments, whereas I have now a bougie which does not bend,—still I have little doubt, and the sensations of my patient confirm my conviction, that I have been gradually getting lower since the 7th inst. *I feel the bougie grasped every time I introduce and extract it.* Only the very faintest streak of blood is ever to be seen after our most protracted operations.

Feb. 7th.—On fourteen different days I have visited my patient since my last report. On some mornings he was rather sore, or the swallowing power was a little impaired, from the previous operation, and then I did not of course do anything. On others I have passed the instrument lightly down to the stricture, and made very gentle pressure on his giving me a signal that I was in the right direction, and have withdrawn it as soon as his power of holding his breath was gone. And this process I have repeated six or eight times the same morning, after brief intervals of rest. Once or twice, after passing the bougie, I have even ventured to give it into the patient's own hand, hoping that his sensations might guide him the right way. Some of my introductions he described as not so happy; and though he could assign no reason for this conclusion, and I myself could detect no difference in their course, I always, on receiving a preconcerted signal of this import, immediately withdrew the bougie. I am now ten inches down, and there I stick; I cannot advance. There is no bleeding after the introductions, however often repeated, and it is most certain that I always feel the instrument grasped. On the other hand, he certainly swallows with no less effort.

10th.—I accompanied my patient at his request to Birmingham, and there passed the bougie three times in the presence of Dr. Blunt. The doctor was abundantly satisfied that the introductions were right, and that the instrument was of the right size. He recommended us to persevere with it, making brief and light pressure on the stricture, and by no means to change it for a smaller until we were *quite* sure that we could not get through with it. He feels convinced that we shall ultimately succeed, and gives it as his opinion "that when once we have got through the stricture the dilatation will proceed very rapidly."

19th.—After many days' cautious procedure after the manner described, I suppose I *may* have this morning used a little extra force, and attempted to "wriggle" the bougie through. My patient, too, I fancied, on one occasion pressed with rather a firm hand. There may not have been much in all this; but he left me saying that "something had been done, some part had been reached which had never been reached before, whether for good or for bad he knew not. It was as though the very vitals of his frame had been touched."

21st.—For the first time since I commenced with this case my patient failed to come to his business this morning. When I saw him yesterday his tongue was very white; he was (to use his own ominous expression) "quite shut up;" his breath was bad, and I could detect the odour of pus. He, however, managed to drive up to my house this afternoon; but he looked exceedingly ill, and it was with the extremest difficulty and suffering that he swallowed a little water. Indeed he walked about my room, stamping upon the floor in agony, while he was doing this.

23rd.—This morning I had the satisfaction to see my patient improved in all respects. But his relatives, in alarm at the danger through which he had passed, now suggested the discontinuance of the treatment. I resisted firmly; but determined to let him rest from all operative interference for a week or ten days.

March 14th.—I resumed operations at the end of the time last mentioned. I have now been using this bougie three months. I have not made the least progress the last month. I therefore ordered three or four long straight bougies to be made, tapering down to a very fine point, and each containing a thin stilette. These bougies were to be one-eighth of an inch in calibre, and to taper to one-twelfth of an inch at the point.

25th.—While using one of these fine bougies this morning, I got it down considerably further than I had ever reached before, about twelve and a half or thirteen inches, and I had the greatest difficulty to extract it.

30th.—It has been necessary again to suspend operations a little. This morning in attempting to pass down, one or two of my instruments bent, and were spoiled.

April 6th.—Success, long worked for, wished for, and waited for, has come at last. *I had this morning the inexpressible satisfaction of passing through the stricture and into the stomach.* The bougie went through, as it were, of itself, and almost unexpectedly. I had just before introduced one eleven or twelve inches down. Having once passed the stricture, the instrument was not difficult to pass on into the stomach; but the sensation given was as though the orifice through which I was passing was exceedingly small, and *but just large enough to admit the instrument.* But below the stricture all was right. My patient was now black in the face and greatly distressed for breath, so I hastened to extract the bougie. I found this no easy matter. I had to pull very hard indeed—almost roughly,—for he was suffocating. Once having got it through the strictured portion, the rest was easy. Mutual congratulations followed this slowly-won triumph of perseverance; mine, however, were considerably tempered by the thought that I might only have got down by a sort of lucky accident, and might for many a day be unable to find that "narrow path" again.

8th.—None the worse for the passage of the stricture, but swallows no better.

9th.—I again attempted to pass the same bougie, and failed. I suppose I must have caught it at the edge of the stricture, as it bent and was completely spoiled. Under the belief that there might be swelling of the part, and with a view to give the patient time to get some support, I omitted operations for a few days.

25th.—After repeated failures with these small bougies, I again tried the one which I had used for three months. I

used force, in answer to the usual signal, but failed utterly. After further attempts on the 20th, 21st, and 25th of April, I deemed it again advisable to let him rest. All this time his power of swallowing was slightly worse than when we began to use the bougies. He was, in fact, living almost entirely on fluids.

May 1st.—*I again passed through the stricture into the stomach*, using one of the bougies of the same size as that with which I first succeeded in doing so. I had previously arranged with him that, in the event of a successful introduction, he should try to breathe with the bougie in the œsophagus. He at once did so. I then held his head back, so as to keep the bougie as much as possible off the epiglottis. He coughed a good deal, and large mouthfuls of fluid came welling up as before. In this way he managed to retain the bougie twenty minutes. The extraction was as difficult as before.

4th.—After a rest of three days, I passed the stricture with a slightly larger instrument, measuring at the point one-eighth of an inch, and increasing to one-sixth of an inch. Retained this ten minutes.

12th.—I this morning passed through the stricture the bougie which I had used for three months before I first got through it. This bougie measures one-sixth of an inch from one end to the other, and has no tapering extremity. I extracted the stilette immediately after the introduction, and he was able at once to bend his head.

18th.—*Ever since the second passage of the stricture, I have always readily succeeded whenever I have tried to introduce any bougie.* The patient complains of imperfect swallowing, which lasts during most of the day after the introductions. I find the introductions and extractions every day becoming easier. To-day he rather surprised me by walking about the room with the bougie in his stomach. I am sorry that he cannot report any alteration for the better in his swallowing power since I took him in hand.

20th.—I thought it advisable to try a larger bougie. I had one by me which, like the last, has no tapering extremity, and measures $\frac{1}{14}$ths of an inch. I passed it with rather a tight squeeze and an unavoidable jerk. I ought to have mentioned that during the last fortnight we have limited the time of retaining the instrument in the œsophagus to five minutes. In all subsequent introductions this has been the rule.

June 1st.—During the last ten days I have only on five passed this large bougie. It has appeared to me and to the patient to put so great a strain upon the parts that, though no soreness is complained of, I have thought it desirable thus to withhold it. I remark that it always passes with a jerk over some posterior prominence situated at the strictured portion. I am concerned to find that improvement in the swallowing fails to follow my undoubted progress in the dilatation of the stricture. The muscular fibres of the œsophagus, I suppose, have lost their contractile power for want of use. I begin now to fear that, though I may, and undoubtedly shall, remove the disease, the effects of time on these muscular fibres—their long disuse—may oppose a formidable barrier to my patient's complete cure.

24th.—Every day this month (excepting Sundays) I have passed this bougie, and every day with increasing facility to myself and patient. All complaints of soreness have ceased. The œsophagus grows wonderfully accustomed to the daily operation. But still I do not remove the lump posteriorly over which the bougie invariably goes *per saltum*. I should be glad to try a larger size now, but I have unfortunately nothing at hand except œsophageal bougie No. 1; and I know very well that this would only bend when it came to the stricture. Besides it is a little too large (one-third of an inch). My patient has been telling me latterly that he really thinks he has been eating rather more. He has not liked to speak too positively. The last four or five mornings, however, some rather decided indications of this sort have followed the introduction of the bougie; he has eaten during the day two good meals. The next morning this facility leaves him, to be restored by my hands. Altogether I have no doubt he is eating more and more easily. He begins to dispense with the application of the thumb to the throat; and, when he has any difficulty, he prefers to wait a little and squeeze down the morsel by muscular action.

30th.—My patient gently hints to me that he is anxious for me to call as early as possible to open the stricture for him, so that he may get to his improved feeding. My visits seem to grow more pleasant.

July 3rd.—I passed an instrument measuring one-fourth of an inch at the point and a little above it, but increasing in size to $\frac{1}{14}$ths of an inch, and containing a good stilette. Experienced little difficulty in the introduction myself, but my poor patient had a most painful time of it. He could scarcely endure it the regulation five minutes. Considerable pulling was requisite to extract. During the subsequent use of this instrument (on the 4th, 6th, 7th, 8th, and 9th inst.), the prominence over which I have lately had to go with a jerk disappeared.

10th.—Introduced a bougie measuring at the point, and about an inch and a half above it, $\frac{1}{14}$ths of an inch; it then suddenly widens a little, and becomes one-third of an inch in size. This instrument represents the No. 1 ordinary œsophageal bougie, from which it differs in the possession of a stilette and a tapering extremity. This bougie, beautifully adapted for my case, passed with much ease; but was very difficult to extract. The patient scarcely bore it three minutes.

12th.—Again passed the bougie. There is not much arrest at the strictured portion.

13th.—Yesterday he ventured to eat some strawberry tart at dinner, and a rice pudding. The tart seems to have afforded him considerable delectation. He describes himself as eating better than he ever did before. Complains very much of the difficulty of enduring the bougie five minutes in the œsophagus. He now suffers from heartburn for two hours after its use every day.

22nd.—Ventured last evening to attend a public dinner, and managed exceedingly well. "There were numbers of soft things on the table which he could easily swallow; and if he happened to have in his mouth too large a morsel, he had only to wait and it went down." Having always had to decline every invitation of this kind before, he experienced, and expressed to me very naturally this morning, great delight at the power he had acquired of dining with his fellow-creatures. "And if," he says, "no more improvement is made than that he has already newly received, he will consider himself amply repaid for all he has gone through." Is much improving in condition from the increase in the quantity and quality of his food.

Aug. 5th.—For three weeks I passed this instrument every day, and with increasing facility. Five days ago he went to Southport, where he has remained without any operative interference until last night. He has been able to manage very comfortably at table amongst his friends. This morning I passed a larger instrument—one measuring at the point one-third of an inch, and increasing in calibre to $\frac{1}{14}$ths of an inch.

28th.—He returned to Manchester after a week's stay at the Lakes. I had, previously to his going there, every day for three weeks passed this large bougie. He must, of course, have felt great confidence in his powers of swallowing to venture all that distance away from me. He was very much pleased with his performances at the public tables at the hotels.

31st.—All obstruction has ceased now at the strictured portion to the entrance of this instrument. I have yet one more bougie to trouble my patient with, *and one only*. It is a bougie measuring at the end $\frac{1}{14}$ths of an inch, but almost immediately widening to half an inch. In fact, it is a good half inch in thickness. I carefully passed this monster, with a brief arrest at the site of the stricture, but with scarcely more annoyance to the patient than he had felt from the one previously used.

Sept. 25th.—I have introduced the bougie daily during the last month, and have found the dilatation of the last portion of this old stricture rather a tedious matter. The patient insists all the while that he is *quite cured*, that his *swallowing is perfect*, and mildly asks me "how long these daily operations are to last? They are not painful exactly, but they are a bore in the middle of every morning." I perceive he is getting independent of his doctor.

Oct. 28th.—*I daily pass this instrument instantaneously, and without any arrest.* I have seen my patient take meat at luncheon to-day. *I can detect nothing wrong with his swallowing.*

Dec. 1st.—We went together to see Dr. Blunt to-day in Birmingham. I passed the bougie instantaneously and without the slightest arrest in his presence. We both, I need not say, consider our patient quite cured.

March 16th, 1864.—*More than three months have now elapsed since I passed any bougie in this most interesting case. I have not even seen my patient until this morning all this time.* He habitually partakes of anything and everything that may be placed before him, and there is no difference between his power of swallowing and that of any other person. In place of the thin-faced, pale, delicate-looking gentleman I found him towards the end of 1862, I saw him this morning in possession of sound, vigorous health; his face well filled up; his colour florid and healthful. His muscles, formerly soft, flabby, and

ill-developed, are now firm and well grown. His chest is even broad and open for a man of his size, and he is rather inclined to *embonpoint*. The look of suffering and depression has passed entirely away from his features. He has now become a captain of volunteers; his duties are not at all too much for him, and he can pass the word of command in no weak and sepulchral voice.

Manchester, 1865.

CLINICAL SURGICAL CASES.

BY GEORGE BUCHANAN, A.M., M.D.,
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I. RHINOPLASTY, FROM THE FOREHEAD, THE PERIOSTEUM INCLUDED IN THE FLAP.

IT has long been known that bone is in great part dependent on the periosteum for its vascular supply, and that the removal of this membrane to any great extent is usually followed by partial necrosis and exfoliation. Of late years, however, it has been found that the periosteum may be separated from the bone to a limited degree without danger of necrosis, and that in the transplanted tissue a deposit of bone readily takes place. Advantage has been taken of this knowledge by many practical surgeons, especially on the Continent, foremost amongst whom must be named Professor Langenbeck. After a visit to Berlin, where I had the advantage of seeing that celebrated surgeon perform the operation for renewing the hard palate, I determined to try osteoplasty in the first case which afforded an opportunity.

I have not met with a case of cleft-palate since, but the success of some of Langenbeck's operations is most encouraging. I saw several in which the gap was completely filled up. One in particular I remember, where, with the patient's permission, I pushed a needle against the new palate, and found that its point impinged against solid bone, which was formed in the transplanted periosteum.

In the following case I applied the principle to the formation of a new nose. I did so with confidence, because it had been done with success by Langenbeck and others, and I had no fear of exfoliation of the cranial bones. Some months previous to this time I had under my charge several cases in which large portions of the cranial bones had been completely denuded of periosteum, and in most the recovery of the bone was complete, granulations having sprung up all over the surface. Besides it is to be remembered that the cranium is very freely supplied with blood from within, so that there is little risk of exfoliation unless the bone itself is injured. Acting on this knowledge, I had no hesitation in stripping the frontal bone of part of its periosteum, and the result of the case showed it can be done with perfect safety.

Jane S——, aged twenty-four, was admitted to the Royal Infirmary Feb. 25th, 1863. Three years previously she was a patient in this hospital with lupus affecting the nose. The disease was arrested after three months' residence. On admission it was found that the whole organ, from the nasal bones downwards, had been destroyed by the disease, but the edges were completely cicatrized, and there was no appearance of a return in any other part. She had employed an artificial substitute, but it was so inconvenient and troublesome that she had long discontinued its use, and was anxious to have the deformity remedied. I accordingly yielded to her request to have the operation performed, and accomplished it in the following way:—

The patient having been put under the influence of chloroform, I cut away the stump of the nose, and thus left a free bleeding edge around the anterior osseous margin of the nares. I then formed a flap, the shape of a leaf, on the forehead, the part corresponding to the footstalk reaching to the roots of the hair. The upper half of the flap I dissected from the pericranium, and then cut deeply and firmly down to the bone. The lower half of the flap I detached with a blunt instrument, tearing the periosteum from the bone, and leaving the latter completely bare. No vessels required ligature. I then twisted the narrow part of the flap, where it remained attached to the root of the nose, and found I could easily apply its edges to the raw margin of the stump. Two silver wire sutures were inserted on each side, and in the intervals sutures of horsehair. The footstalk was made to form a columna, and was attached by a wire suture.

Next day the parts were a little swollen, but warm and healthy.

On the fifth day it was found that the horsehair sutures had caused a little ulceration, and they were removed. The wire sutures were retained, having caused no irritation. On the eighth day, the incisions having united, all the sutures were removed. Three weeks after the first operation the twisted neck was cut across, formed into a needle shape, and inserted into a depression cut into the integument over the bridge of the nose, and fastened by a silver suture. It healed by the first intention.

The wound in the forehead was dressed with lint soaked in water. Granulations soon sprang up and covered the whole surface of the bone, and cicatrization rapidly took place.

She was dismissed on the 13th of June, remarkably improved in appearance, and with a very fair nasal organ. The upper part of the nose was decidedly firmer and more solid than in a former case in which I performed rhinoplasty successfully, but I cannot affirm that bone had been deposited at the date of dismissal.

Some time after leaving the hospital I learned that she was seized with disease of the kidneys and anasarca, of which she died. But the operative procedure was attended with such success that I shall have no scruples in adopting the same method in other cases which may come under my charge.

Glasgow, July, 1865.

Provincial Hospital Reports.

UNITED HOSPITAL, BATH.

A CASE OF EXTENSIVE TUBERCULAR DISEASE OF THE CERVICAL PORTION OF THE SPINAL CORD.

(Under the care of Mr. GORE.)

THE notes of the following case were reported by Mr. Thos. Cole:—

Eliza E——, aged sixteen, fair and florid in complexion, with a rather healthy look, and not emaciated, was admitted April 5th, 1865.

She stated that five weeks previously she was attacked with tremor in the extremities, and a cold feeling pervaded her whole frame. Her neck then became stiff, and afterwards her arms and legs, in which latter she completely lost all power of motion. At first she also lost the power of sensation; this, however, gradually returned, and on admission she possessed it universally. The bladder was found to be much distended, making an abdominal swelling like the uterus in the sixth month of gestation. The urine from the over-distended bladder had previously dribbled away; but after her admission it was carefully drawn off by catheter twice daily. A bed-sore, of large size, existed on the lower part of the back, over the sacrum; she was therefore placed upon a water-bed.

April 7th.—She can now move her upper extremities so far as the hand and forearm are concerned; but she cannot fully raise the arms or shoulders. When her head is moved (lifted up) she experiences pain in the upper part of the back. There is rigidity of the muscles in the cervical and upper dorsal regions, but no tenderness on pressure. She has an almost continuous pain extending from the feet to the knees, and sometimes as high as the hips: this varies in intensity. Often she has a tingling in the legs, the muscles of which at times spasmodically contract. She perspires much at night. Her pulse is 104, full and regular.

8th.—Two superficial eschars were made with caustic potash in the lower cervical region, on each side of the spinal column. A twelfth of a grain of bichloride of mercury in decoction of cinchona to be taken three times a day.

10th.—Pulse 100. There is now marked improvement as regards the power of the muscles of shoulders and arms. Her legs move spasmodically, with the effect of making them painful. Appetite bad.

12th.—Temperature in axilla, 99·50°. She cannot lift her arms so high as she could. Her urine contains puriform mucus in large quantities. The pain in the legs is just as severe as before.

From this date to the 6th of May she gradually became weaker, and the bed-sore spread widely and deeply. On the 5th of May her pulse was 148, hurried and feeble in the extreme. Her urine daily became more and more ammoniacal,

with large deposits of urates, pus, &c., and lessened every day in quantity. The fæces were always passed involuntarily. She died on May 6th.

Post-mortem examination.—The brain was quite healthy. The spinal cord in the lower cervical region was pushed backwards, and compressed against the vertebral arches by an extensive tubercular deposit, external to the dura mater. This part of the spinal cord was soft and pulpy for about two inches; lower down it appeared somewhat shrunken and wasted. There was no great vascularity of the surface, and no effusion of serum. The periosteum covering the posterior surface of the bodies of the fourth, fifth, sixth, and seventh cervical and first dorsal vertebræ was more or less destroyed and detached, leaving the surface of the bone bare, white, and rough. Between the fifth and sixth cervical vertebræ the intervertebral substance was almost completely destroyed, and a passage in this way established to the front of the spine, where there was an abscess behind the pleura, containing about six ounces of scrofulous matter. She had no disease of the lungs. The kidneys, unfortunately, were not examined.

WALSALL COTTAGE HOSPITAL.

SEQUEL TO A CASE OF EXCISION OF HEAD OF FEMUR.

(Under the care of Mr. REDFERN DAVIES.)

SINCE the appearance of our report of a case in which the head of the femur had been removed for morbus coxæ on the 24th of November, 1864 (see THE LANCET of Jan. 28th, 1865), the following has been the condition of the patient up to her death on March 9th:—

Two days after the operation she partook of her ordinary food, and under the influence of good diet &c. her bodily condition greatly improved. At her own request, on Christmas-day she was taken down-stairs and dined with her relatives. From that time until shortly before her death, she was accustomed daily to play about the street upon her crutches.

The discharge from the wound was of a healthy character, never profuse; and at one time it had almost ceased, and the wound likewise was nearly closed and cicatrized. The fistulæ around the joint had become healed.

The length of the limb seemed to be about an inch shorter than its fellow, the decrease corresponding to the amount of bone removed. The movements of the extremity were voluntary and natural, and although they were somewhat limited in extent, she could walk or shuffle some few paces without *any* assistance.

About the middle of February, without any assignable cause, obstinate and incessant diarrhœa and vomiting set in; general emaciation, with reopening of the cicatrized wound, followed; and, unchecked by treatment, these continued unabated till death took place on March 9th. We may observe that she was throughout treated as a home-patient.

Post-mortem examination.—Upon inspection the wound appeared to be as large as when it was first made, and its gaping edges exposed a portion of bone. The proximal extremity of the femur occupied the acetabulum; it was firmly covered by a coarse periosteum, which was continuous with that of the shaft, and intimately adhering by fibrous connexions to the bone beneath, and surrounding it were a few osteophytes. A vigorous endeavour had been made by nature to form a fresh capsular ligament, which was very strong and thick—in some places cartilaginous; and, save at that part which was situated directly under the wound, it still remained, notwithstanding the excessively debilitating causes which had been the immediate precursors of death. About one-fifth of the bone was uncovered.

The opinion of Mr. John Day, one of the consulting-surgeons to the hospital, who frequently visited the case, and that of Mr. Redfern Davies, is, that prior to the occurrence of diarrhœa, &c., the case bid fair to be a successful one.

THE ST. LOUIS HOSPITAL OF PARIS.—This establishment has lately undergone extensive repairs and valuable improvements; nor were the former uncalled for, as the hospital was built in 1606, for the shelter of the plague-stricken. It was placed under the guardianship of St. Louis, as that monarch had died of the same disease. The building was formerly outside the capital, but has long been included within its walls.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JUNE 27TH, 1865.

DR. ALDERSON, F.R.S., PRESIDENT.

ON THE OBSTACLES TO THE RE-ESTABLISHMENT OF NATURAL RESPIRATION AFTER THE PERFORMANCE OF TRACHEOTOMY: SOME CASES, WITH REMARKS.

BY THOMAS SMITH, ESQ., F.R.C.S.

THE hindrances to the withdrawal of the canula and to the restoration of the passage of the larynx, to which attention is drawn in this paper, are such as only take effect after the performance of tracheotomy, and as a consequence of that operation. They have no reference to the persistence of any cause of obstruction that may have necessitated the introduction of the tracheal tube. The author in this paper has detailed cases where great and even insurmountable difficulty occurred in removing the canula after the performance of tracheotomy. He enumerates four causes of obstruction to the passage of air through the larynx after that operation:—1st. An accumulation of granulations within the trachea, just above the canula. 2nd. Obliteration of the cavity of the larynx by adhesion of the margins of the rima glottidis. 3rd. A loss or impairment of function in the laryngeal muscles. 4th. A narrowing or partial collapse of the trachea from necrosis of its cartilaginous rings. The author endeavours to show that a temporary impairment or loss of function in the laryngeal muscles is no unfrequent occurrence after tracheotomy; and suggests that it may reasonably be referred either to the complete interruption of all exercise of function in the larynx which the operation for a time entails, or to a reflex irritability of the muscles of the glottis from the contact of the canula with the mucous membrane of the trachea. With a view to obviate the occurrence of some of the untoward contingencies described in the paper, the author recommends a small appliance devised by himself to be worn in the orifice of the canula. This instrument, while it allows the air during inspiration to enter through the wound, directs all the expired air through the cavity of the larynx. He claims for this appliance—that it at once restores the voice; that it helps to clear the cavity of the larynx from false membrane or accumulations of mucus; that it forms a safe method of testing the permeability of the larynx; and that its use as a preliminary measure to the final removal of the canula will accustom the rima glottidis to the transit of air, and diminish its irritability.

THE APPLICATION OF SUTURES TO BONE IN RECENT GUNSHOT FRACTURES, WITH CASES; ALSO REMARKS ON THEIR SIMILAR USE IN SOME OTHER FRACTURES AND OPERATIONS.

BY BENJAMIN HOWARD, M.D.,

OF THE NEW YORK COLLEGE OF PHYSICIANS AND SURGEONS, AND LATE ASSISTANT-SURGEON U.S. ARMY.

The author exhibited statistics showing the large number of secondary amputations which are rendered necessary in gunshot fractures of the extremities by the inevitable transportation from the battle-field to general hospital. The disastrous results in these cases are mainly due to the constant motion of the fractured ends of the bones, between which innumerable loose fragments and sharp spiculæ of bone are ground together, mangling the soft parts adjacent, and producing violent irritation and inflammation, which is still further increased by the pressure and constriction of disarranged bandages and splints firmly applied on starting to prevent displacement—an attempt perfectly hopeless without the use of other means. The most careful efforts of this kind are frequently followed by such inflammation during the "middle passage" as to destroy every hope of saving either the limb or the life of the patient.

Resection of the shaft of the long bones has been practised, with removal of the loose fragments, but the motion remains undiminished, and the ends of the bone are continually apart. In 1863, the author, in a communication to the Surgeon-General of the U.S. army, proposed a plan of treatment for gunshot fractures of the humerus, which he had since carried out, with a view to obviate the evils referred to wherever the operation might be practicable. The treatment consists in cutting down upon the seat of fracture, enlarging the wound or otherwise, removing all fragments of bone and everything

which can act as a foreign body, making a clean section of the fractured ends transversely, or at such parallel obliquities as to secure the most perfect apposition with the least shortening. The ends are then firmly secured together by two wire sutures, the edges of the wound approximated, and a light splint applied by a simple retentive bandage, so as to leave the wound freely exposed for the repeated application of cold water from the canteen of the patient.

The chief points in the operation are to carefully avoid any unnecessary degree of disturbance of the soft parts, and especially of the periosteum; to introduce the two sutures as described, through only one cortical portion of each end, and each as nearly as possible in the same line of diameter of the bone, to prevent any hinge-like motion. The sutures, which are of annealed iron, or better, perhaps, of plated copper wire, may be cut off short, or be left protruding through the wound, so that, by successive tightening twists, Nature may be aided in her natural process of extrusion.

The advantages claimed for this plan of treatment consist—

1st. Negatively. In the absence of all previous causes of irritation.

2nd. Positively. In securing complete coaptation and perfect rest.

A case of gunshot fracture of the humerus was related in which all the details of this plan were carried out. Although the patient was afterwards left uncared for on the field, and submitted to extraordinary exposure, the limb was in excellent condition, and, as far as could be ascertained, it continued so until subsequent recovery, and transfer of the man to another regiment.

Another case also was reported of severe fracture from lodgment of a fragment of shell in the femur, with great shortening. After removal of the missile and fragments of bone, the fracture was reduced, and without section of the bone, by means of one stout wire suture. The refitted, interlocked fragments were permanently secured *in situ*. The patient, who was sixty years of age, and of feeble constitution, was rumoured to have died a few days afterwards *en route* to general hospital. This plan of treatment not only contemplates disposal of the chief sources of immediate danger, but of those causing great ultimate delay, thus averting the innumerable intercurrent diseases incident thereto. It is new only in its application. Substantially the same operation, including the use of the wire suture, has for a long period been practised, and still meets with general approval as a secondary operation for ununited fracture. Other things being equal, it cannot be less admissible as a primary operation, where, in the absence of all pathological changes, we have a healthy condition of all the parts, with sound bone in apposition and at rest.

Although it would be unwise to anticipate too definitely the histories of the author's cases, which may be hereafter collected from the various hospitals to which they were sent, and from which a more complete report will be made, his experience so far justifies him in submitting the plan of treatment to the profession. He would recommend the use of wire sutures in the manner described in certain compound fractures with great displacement, in Pirogoff's operation if practised, and in fractures of the jaw, in which he had used them with great advantage.

A Fellow asked the author if he had met with any cases in which the upper and lower extremities had been treated.

Dr. HOWARD replied that the plan was introduced for the treatment of fracture of the humerus, and had been adopted in but one case of fracture of the femur. Dr. Howard then exhibited several diagrams illustrating the chief points in his paper.

Mr. FRANCIS MASON asked if the process was not a difficult one? He had seen Mr. Fergusson do the operation twice, and each time with considerable difficulty.

Dr. HOWARD said it was difficult without assistance. He had, however, once done it in five minutes; but, as a rule, the operation required twenty or thirty minutes.

EXTERNAL LATERO-ANGULAR DISLOCATION OF THE RIGHT ELBOW-JOINT, A NEW FORM OF DISLOCATION, WITH ACCOMPANYING DISSECTION OF THE LIMB.

BY FREDERICK JAMES GANT, ESQ., F.R.C.S.,
SURGEON AND PATHOLOGICAL ANATOMIST TO THE ROYAL FREE HOSPITAL.

This injury occurred in the person of a man, aged fifty, whose right forearm was jammed between the buffers of two railway carriages. He was admitted into the hospital under the care of Mr. de Méric, who placed the limb at the author's disposal for dissection.

The articular ends of the three bones which form the elbow-joint were displaced into the following remarkable relative position:—Both bones of the forearm had undergone an external lateral dislocation, as complete as is usually met with, the larger sigmoid cavity of the ulna resting against the outer condyle of the humerus. But both bones had also undergone displacement upwards and outwards, turning on the end of the humerus as a hinge until their axes formed a right angle, or rather less, with that bone; thus constituting an external latero-angular dislocation. The inner half of the larger sigmoid cavity embraced the condyle and capitellum (of the humerus) just behind its articular surface; the coronoid process resting externally against the one, and the olecranon being underneath the other, as far as the ridge between it, the capitellum, and trochlea. The head of the radius was in close relation, not contact, with the external ridge of the humerus, just above the condyle; the ridge bisecting the cup-like cavity of the radius. The head of this bone was, therefore, neither in front nor behind the humerus; it was not dislocated either forwards or backwards.

With this wrenching displacement of the forearm outwards and upwards, all the ligaments of the elbow-joint, save the posterior one, gave way entirely.

The disposition and state of the muscles, vessels, and nerves are fully described in Mr. Gant's original communication to the Society; also the external appearances of the limb, and their connexion, as signs of the dislocation above described.

A large lacerated wound in the forearm, exposing the flexor muscles, with the radius and ulna, was the direct result of the contusion. A small aperture in the skin, just above and behind the inner condyle of the humerus, and leading into the joint, made the dislocation compound.

Amputation of the arm in its upper third, having been performed by Mr. de Méric, was followed by an excellent recovery, delayed only by partial sloughing of the stump, consequent on the extensive injury.

Reviews and Notices of Books.

Contributions to assist the Study of Ovarian Physiology and Pathology. By CHARLES G. RITCHIE, M.D. London: Churchill and Sons.

IN his preface Dr. Ritchie expresses a hope that these contributions may be of use to those working in the same field, and afford to the general inquirer a fair synopsis of what has hitherto been done. But the book itself is of such intrinsic merit that its professional reception will, we trust, far exceed the author's modest anticipations. Ovariotomy is an operation of such vital importance that the record of every individual case is still eagerly read; and its admission amongst the justifiable operations is so recent that it is incumbent on every operator to chronicle his results, whatever may have been the success attending his practice. In most of the existing records of ovarian disease operatively treated, the pathological descriptions are necessarily brief, as each case cannot but present some characteristics identical with appearances described by other authors or in other cases. But the experienced operator and the interested professional reader do not stand on the same level in their knowledge; and this work, narrating with equal conciseness and exactitude the very latest views on ovarian physiology and pathology, will supply a want which many must have felt, and afford precise information as to the exact significance of adenoid tumours, of dendritic growths, of dermoid cysts, of hyperplasia, and of other orthodox pathological terms.

Dr. Ritchie's work divides itself into three distinct parts. The first comprises a succinct history of the ancient views in reference to ovarian physiology and pathology; and the extent of the individual labour and research expended on the investigation can only be properly appreciated by those who have themselves been amongst the books. The second part of the work is a reprint of the views on ovarian physiology which were published some twenty years ago by Dr. Ritchie of Glasgow. The upshot of his laborious investigations led to his enunciating a belief that vesicular development occurred

in the ovaries from earliest childhood; and that such consequent changes as the rupture of a Graafian vesicle involved did not necessarily produce a corpus luteum. Pflügel has lately put forth the same opinion, but has advanced it without any such exactitude in the statement of his premisses which especially distinguishes the records of the elder Dr. Ritchie. It may well be a labour of love, as of duty, in the author to reprint a series of observations so far in advance of the time when they were made, and so specially worthy of consideration in the present day.

The third part of Dr. Ritchie's book (according to our dogmatic division) comprises a careful analysis of the latest researches on the subject, and especially those of the German investigators who have taken such a decided lead in whatever refers to the minute pathological inquiry about ovarian disease. German theorists have an unhappy tendency to make their meaning obscure without labouring to be brief. But thorough acquaintance with the language and a gift of condensation have enabled Dr. Ritchie to present tersely and clearly the most recent views of Grohe, Pflügel, Klob, and other German writers on the subject; although he is fain to confess that the learned professor of Bonn "leaves us with the impression firmly fixed in our minds that we are still in the dark, and that the more we peer into it the more impenetrable becomes the darkness." (p. 156.)

The following passage represents the author's views as to the formation of ovarian cystic tumours, the details being very elaborately described:—

"There are no adventitious structures peculiar to the ovary. Tubercle or cancer may be developed; hydatids may be found: but these are of comparatively rare occurrence. The great mass of ovarian disease is due to slight errors of nutrition. More serum is poured into a vesicle than is normal. The secretion is retained instead of being got rid of, or is poured into a cavity that was not intended to receive it. Cells go on multiplying *ad infinitum*, and thus produce hyperplastic growths. Changes which normally occur in the contents of vesicles after they have been discharged take place within the vesicles themselves, either in a perfectly regular series or slightly modified by their novel situation. Such are the different ways in which ovarian cysts are produced."

With special opportunities for research, Dr. Ritchie has carefully worked out the views thus simply expressed; and his concluding chapter is a masterpiece of careful and thoughtful observation, pursued with knowledge, recorded with judgment, and free from any of that wild theoretical assumption which so lamentably characterizes many more pretentious works.

Consumption as Engendered by Re-breathed Air and consequent Arrest of the Unconsumed Carbonaceous Waste; its Prevention and Possible Cure. By HENRY MACCORMAC, M.D. Second Edition, enlarged and revised. London: Longman and Co.

THE review of this book is a work more easy than pleasant. The author has only one idea, which occurs monotonously in every paragraph of the book. It is this—and we fear we must say that in the next sentence we convey as much information to our readers as the perusal of the author's entire book will give them,—the cause of tubercle, the alone and single cause of tubercle, is the breathing of air which has been previously breathed; breathe such air, and you will infallibly get tubercle; breathe air that has not been respired before, and you cannot have tubercle generated in your system. The author would probably rejoice—he is so delighted with his discovery—to be described as the prophet of what he calls "unprebreathed air." There is probably much truth in the author's opinion, and we shall be glad, for the sake of the future health and happiness of the race, if it shall turn out that it contains all the truth on this subject. But he must forgive us for saying that the demonstration of the truth of it will require a very different book from his present one. If he would really have the honour of establishing the doctrine which he so industriously reiterates, he must make up his mind to a book consisting, not of the same assertion over and over again, but of a large collection of dry facts and rigid conclusions therefrom, excluding everything that may involve or cover a fallacy. He must make up his mind to lay aside rhetoric, and restrict himself to logic. He claims to be the discoverer of the cause of tubercle; and if he be right in his claim, he has made a discovery which will eclipse all the discoveries of Louis. But, unfortunately, there is a great difference between Louis's method and his. Louis laboured to accumulate facts; his book will be a lasting monument of work. Dr. MacCormac certainly multiplies words; but his book does not contain the numerous and discriminated facts which are necessary to establish his proposition. He may be right in his view that the one cause of tubercle is the breathing of air which had been previously breathed, though we surely see phthisis developed in persons and families who, as regards the breathing of fresh air, are more favourably situated than other persons and families in whom it is not developed; but the profession must have different evidence before it accepts what the author hastens to call "MacCormac's Law" as a scientific dogma.

Dr. MacCormac is under no obligation to the printer of this nicely-bound book. The author seems to contemn the art of punctuation, its signs, commas especially, being often discarded, and at other times used in the wrong place; and the printer has done nothing to supply the defect. This is the more to be regretted as the author's style is one which needs the help of accurate punctuation.

OUR LIBRARY TABLE.

Lectures on the Diseases of Infancy and Childhood. By CHARLES WEST, M.D., F.R.C.P., Physician to the Hospital for Sick Children. Fifth Edition, revised and enlarged. London: Longman and Co.—Dr. West's book requires no lengthened notice from us. The present is the fifth edition in English; the work has been translated into Danish, Dutch, and Russian; it is being translated into French; and has passed through three editions in America and four in Germany. This is "praise enough," yet not too much; for, though Dr. West clings with intelligible conservatism to a few doubtful opinions on important points of practice, the work is full of merit. Its clear descriptions of disease, its richness in valuable remarks suggested by large and careful observation, and, withal, the fine English style of the lecturer, have made the work standard; as the discussion, in this edition, of the most recent points raised in therapeutics and pathology, and the copious reference to the views of the best continental authorities, keep it up to the time, and secure for some while to come its high place in the literature of the profession.

Notes on Spa, or Observations on its Chalybeate Waters. By THOMAS CUTLER, M.D. Seventh Edition. Brussels: Mertius and Sons.—Dr. Cutler has enjoyed the confidence of the inhabitants and visitors of Spa for many years. He writes a description of the natural characteristics and beauties of the place, as well as an account of the composition and uses of the various mineral springs; so that his little book of "notes" would form a useful companion to any intending visitor. We doubt whether the diseases mentioned in this work as curable by the Spa waters are quite so easily exorcised as the zeal and faith of Dr. Cutler lead him to believe. The natural advantages already possessed by Spa must render unnecessary the introduction of that foul-smelling innovation, the peat or moor bath—literally a process of wallowing in soft and rather nasty mud—which Dr. Cutler has added to the resources of Spa.

Opinions and Statistics on the Immediate Treatment of Stricture of the Urethra by the Employment of the "Stricture Dilator." By BARNARD HOLT, F.R.C.S. London: Welch. This is a record of 742 cases of stricture operated upon by the author and other surgeons by the "immediate treatment," with a suc-

cess which speaks strongly in favour of the mode employed. The author contends that in the few cases that have proved fatal, the results have been owing, not to any fault in the operation itself, but, in the main, to the cases not being suited to that procedure. It would be difficult to bring forward a larger amount of testimony of a more favourable kind with respect to any operation in surgery. It remains to be seen, however, whether such almost uniform success will be substantiated by further experience.

Chloroform: its Action and Administration. A Handbook. By ARTHUR ERNEST SANSOM, M.B. Lond. London: Churchill. Since the time of Dr. Snow, no work has appeared having any degree of merit on the action and administration of chloroform. Dr. Sansom has succeeded by the publication of this little volume in producing a very useful text-book on this subject. For some time after the discovery of chloroform, its administration was entrusted to a select few. Its use, however, is now so general that Dr. Sansom's book will be found valuable to a large number of practitioners. Without giving an analysis of its contents, we may refer to one salient point. He strongly recommends the use of an inhaler in all cases. He shows by statistics that what he calls the haphazard method of administering the agent on lint, a handkerchief, or a sponge, is not only unsafe, but unscientific. Like all chloroformists, he is in favour of his own inhaler, and, we think, attaches too much importance to a particular form of construction of the instrument. He quotes Dr. Townley to show with what efficacy and safety chloroform may be employed in obstetric practice, where it is only necessary to procure its stimulating and not its narcotic effects. Dr. Sansom is a careful observer, and has the happy talent of being brief without being obscure.

Small-pox: How to Annihilate it. By R. T. LODGE, M.D. &c. London: R. Hardwicke. — There is nothing new in this pamphlet. It is a popular compilation of what the best authorities have said as to vaccination being, if properly practised, a complete protection against small-pox. The author rightly follows these authorities in insisting on a large number, at least four, separate insertions of the vaccine lymph, and in advising as a precaution, if not a necessity, revaccination. The small-pox of this country is really inexcusable; for Mr. Marson, by revaccinating the nurses who come to the Small-pox Hospital, has completely protected them, so that there has not been one case amongst them for twenty years, although so constantly exposed to the contagion in its strongest form.

Handbook of Dining; or, Corpulency and Leanness scientifically considered. By BRILLAT-SAVARIN. Translated by L. F. SIMPSON. London: Longman and Co. — This book is full of curious information on the subject of which it treats: the work of one who recognised in *gourmandise* a human characteristic. Few of our readers will rise to the admiration of this exclusive "appanage of man" which Brillat-Savarin had. But he was withal shrewd and scientific in his gastronomic speculations. He managed to see relations between gastronomy and natural history, physics, chemistry, cookery, and commerce; and so to give a certain dignity to what is generally considered a merely sensual subject. He is entitled to the credit of having anticipated some of the soundest opinions recently expressed on the subject of corpulence. But, after all, the principal interest of this book is that it gives the history, not to say the classics, of *gourmandise*.

A Group of Annual Reports of County Lunatic Asylums, including the Sussex, the Kent, the Somerset, and the Cheshire.— In the Somerset Report, amongst other interesting tables, is one showing the number of fits by day and by night in each epileptic patient. From this it appears that of 11,759 epileptic attacks, 7881, or about two-thirds, occurred by day. Another fact, well known to those who treat the insane, and illustrated in these reports, is the frequency of tubercular disease. Half the mortality in the Somerset Asylum was from disease of the lungs. In the Cheshire County Asylum, too, phthisis, next to general paralysis, was the most frequent cause of death. In the Report of the Cheshire County Asylum is a table showing the supposed cause of insanity in 176 cases admitted. In 109 of these the causes were unassigned or unknown. Hereditary taint was ascertained in 14 cases, and in 17 instances intemperance was the cause. In the dietary of the Sussex Report, we notice the absence of butter at breakfast. As there is no excess of meat or vegetables in the diet, we suggest the addition of this article at the matutinal meal.

The Edinburgh University Calendar for 1865–66. pp. 252. Maclachlan and Stewart. — Indispensable to every Edinburgh graduate.

The Register of the King and Queen's College of Physicians in Ireland (1865) contains interesting information from the earliest periods of the College to the present time.

Calendar of Queen's University and College, Kingston, Canada. 1865–66.—Although incorporated only in 1841, this institution is now in a flourishing state.

The Physical History of the Earth. Meditations by a Student. 12mo, cloth. London: Bagster. — Without altogether accepting the author's views, it is but fair to say that this little volume may be read with pleasure and profit.

The Geological Magazine for July.—To render this periodical more popular the price has been reduced to one shilling a number.

THE LATE VOLUNTEER CAMP AT WIMBLEDON.

THE hospital arrangements for this year were carried out on a larger scale than heretofore. In lieu of the surgeons' tent, with a couple of beds, one occupied by the officer, provided for casualties occurring to any throughout the *whole* camp, a marquee, containing six beds and necessary conveniences, was reserved for volunteers *only*, with the use of the surgery tent, containing medicines, instruments, &c., with a separate tent for the volunteer assistant-surgeon (supplied by the National Rifle Association), an hospital sergeant, and orderlies provided by the War Office. But few of the beds were occupied, and these for a short time only, excepting the one by Serg. Cousins, who at the commencement of the meeting lost the first joint of his great toe from the discharge of his rifle in snapping a cap, not being aware that it was loaded. He remained in the tent until the day before the review, on which day four of the beds were occupied, but only one patient remained for the night—viz., George Davis, driver Hon. Artillery Company, who was thrown down and received concussion, with some contusions on the face. He was attended by Surgeon Gowland of the corps, who remained, and left with him on the following day. The volunteers who were wounded were severally attended by the surgeons of their respective corps: George Richardson, gunner 2nd Middlesex Artillery, fell from the carriage and received contusions of both feet; attended by Dr. Rice. Private Lewis, London Scottish, was cut on the forehead by a comrade's ramrod; attended by Dr. Westmacott. Private Lockerby, 29th Middlesex, shot in the thigh; attended by Surgeon Stewart. Edward Waters (or Walton), 2nd City of London, received a shot in the buttock from a rifle at the trail; attended by Dr. Wilson. An ambulance, in charge of Staff Assist.-Surgeon Shortt, was employed on three occasions to bring the wounded to the hospital tent. The number of volunteer officers (non-commissioned) and privates at one time encamped was about 800, of which some sixty or seventy received professional aid during the fortnight, the casualties being mostly of an ordinary nature—chiefly diarrhœa. There were but few accidents, and those very slight.

Amongst the many volunteer surgeons who occasionally visited the camp were Professor Fergusson; Drs. Sheppard, Buzzard, Rice, West, Cross, Leonard, Lavies, Bate, and Dane; Surgeons Spencer Smith, Wakley, C. Bennett, F. H. Bates, Moger, Carr Jackson, De Lisle Allen, Love, Propert, Coulson, Cooper, and others. The *entire* camp medical establishment was under Surg.-Major Wyatt (Coldstream Guards), aided by Staff Assist.-Surg. Shortt and Assist.-Surg. Westmacott.

THE LANCET.

LONDON: SATURDAY, AUGUST 5, 1865.

THOSE who delight in the horrible can now scarcely complain of lack of sufficiently strong excitement. The revival of the CONSTANCE KENT tragedy, with its melancholy and strange details; the condemnation to death of a young recluse on her uncorroborated self-accusation of a murder committed in her girlhood; the most righteous commutation of "the sentence of the law" through the exercise of her Gracious Majesty's highest prerogative; the general sense of dissatisfaction experienced by the public that so serious an offence against both human and divine enactment should have been thus summarily dismissed; and the universal sense of apprehension aroused in consequence of the course pursued by the law officers of the Crown, who, without a searching public inquiry, accepted the voluntary sacrifice of one life as adequate atonement for another,—have, in the gloomy forebodings they have created, abundantly satisfied the public craving for excitement. The conviction and execution of Dr. PRITCHARD for a time attracted attention. In his case it was felt that human depravity could go no further. Had he possessed a dozen lives, they would have been too few for that retribution which mankind in self-protection must exercise on all those who thus abandon themselves to crime. He used his experience to his own ruin, and to the destruction of those bound to him by every tie which ordinarily strengthens human affections and maintains social dependency.

While public observation was divided between the child-murder by a young girl and the wife-poisoning by an experienced physician, little heed was given to occurrences which under ordinary circumstances would have been considered as sufficiently horrible. At this time the country is on its trial. Courts of assize are assembled for the vindication of the law. The crimes and offences incidental to many millions are being proclaimed to the world; so that mankind, while they know how much of human wickedness prevails in this our merry England, may at the same time learn how prompt are her laws for the protection of her people, and how just are her proceedings in the conduct of their trials. So long as angry passions stir the breasts of men, and evil counsels divert them from the paths of right-doing, crime in its varied detail must be the result. It is human to err. We do not wonder that in every large community offences of a more or less serious nature should be committed. Their details and their punishment are received as almost matters of course, or at least do not occasion any feelings of extraordinary apprehension. Now and then some criminals stand forth in terrible relief, and by the enormity as well as intensity of their misdeeds for the moment astound our senses by some new revelation of the possible scope and extent of human wickedness. Such an instance has just occurred at Exeter, where a woman named CHARLOTTE WINSOR has been sentenced to death for child-murder. The details of her crimes are immeasurably more shocking than any on record. There is reason to believe that for a long period she had systematically pursued, as her recognised calling, the terrible trade of child-murder, and had in its exercise organized a scale of charges to suit the pockets or to meet the necessities of those whose crimes or misfortunes brought them within her reach. The details of this woman's horrible career have no parallel in the history of human wickedness. Human life was her stock in trade; money her sole inducement to its destruction. Murders have before this been committed through desire for gain, but no such murders as these. Infants, in all their dependency, were her victims. Helpless babes, whose only offence was the accident of their birth, found in this female fiend a kind nurse, who nipped their lives in the bud. Hers was not the shame of their parentage; hers not the burden of their support. She had no inducement beyond the receipt of a paltry payment, and this was at times a matter of promise. Infant murder was her vocation. To what extent she has pursued it is known only to Him who specially careth for little children. It would serve no practical purpose to examine the particular incidents of her repeated crimes, so far as they were given in evidence upon this wretch's trial. The mother and murderess bargaining for the destruction of the smiling babe; the murderess removing the infant from its last earthly embrace to place it between the folds of the suffocating bed; the mother in the adjoining room waiting to hear the result, and then assisting in disposing of the body of her lifeless little one, and all within the scope of a "business" visit, is a horrible picture, and yet it is true. While this was being enacted, the cry of the child still echoed in the ears of the murderess. The mother, bewildered with the enormity of her offence, with senses stupefied, heard not the death-struggle of her infant. Its last moan struck upon the hardened heart of the practised destroyer, and she was "frightened." That cry called out for vengeance; and such vengeance as the forfeiture of one life can afford for the destruction of many, society will shortly obtain. This woman's crime is even more horrible for what it suggests than for that which it details. Her position was recognised, and had long been known. Many children had been seen in her house. Many infants, waiting a convenient season for their destruction, must have been observed by her neighbours; and yet, on their disappearance, no one gave utterance to a word of suspicion until the wild waves proclaimed, on the beach at Torquay, the last crime that she had committed. She must have had numerous confidants: young women betrayed and forsaken, or it may be profligate or forsworn, but still young, with perhaps many years to live, carrying with them a sense of terrible crime—not the less terrible because at present undiscovered. They must now tremble lest, in her revenge, if not in her remorse, she who for a brief space inhabits the convict cell should reveal their names, that they also may meet the punishment so justly their due.

It may well be asked, Is this a solitary case? Is this the only hireling assassin in the kingdom? Alas! we fear that it is not so. We would fain hope that murder for payment is a rare crime. We are willing to believe that there are but few women who revel in the destruction of human life, and think that "it's doing good." The fact, however, remains, that infanticide prevails to an extent terrible to contemplate. We have repeatedly directed attention to this great social calamity as an almost inevitable result of our present social

system. The reports of coroners throughout the kingdom show that many thousands of infants are yearly destroyed. These returns are independent of those who perish indirectly, but not less certainly, through causes that might, by ordinary caution, be prevented. Exposure, want of food, negligence, as surely accomplish the end as direct suffocation. In some instances death results as an almost necessary consequence of the mother's position. We have detailed many examples in which factory girls, returning home, have found their offspring self-suffocated. We might follow into detail causes admitting of a remedy, were it requisite to repeat facts with which persons of practical experience are already familiar. It is unnecessary to do so. The grave and serious inquiry suggested is, How many women, leading to all appearance proper lives, fulfilling the duties and obligations of home, rearing children in humble propriety, hardworking, industrious, longsuffering wives, bear with them the consciousness that they have been accessories to, if not principals in, the commission of a great crime? How many hearts are saddened as they gaze on their children at play, by the thought of one who might, had its life been spared, have mingled in their sports? How many lives are rendered wretched through years of useless and unavailing regret for the commission of crime induced by what at the time appeared to have been hopeless and helpless misery? Are these reports true? Is it a fact that thousands of infants thus yearly perish? If it be so,—and that it is so there are too convincing proofs to permit any doubt,—surely it behoves the State to take some steps for the diminution, if not the prevention, of such deeds. Various measures have been proposed. It has been suggested that a more effective system of registration of births and deaths would necessitate a declaration of facts which, in the case of suspicion, might be available for the detection of crime. To this it may be replied that, in cases where crime is contemplated, means are taken to avoid compliance with the requirements of the law; and that the number of children born so as to come within the provisions of the Act bear but a small proportion to those whose birth is prematurely induced. It has been proposed to renew the foundling system, which may be said to have expired with the active operation of the Poor Law, and to provide a State home for the children of shame whose mothers are unequal to their support. Against this is urged the argument that such institutions, by the facility they afford to profligates, remove all sense of subsequent responsibility, and so act as inducements to crime. Others have suggested the formation of public institutions for the special care of illegitimates where the mothers might be relieved from all responsibility in reference to them, and yet be permitted, if not obliged, to contribute somewhat to their support. It is known that many poor women honestly work for and gladly contribute to the support of their little ones; and it is argued, let us hope not without reason, that much of the crime recorded is induced by the temporary pressure which the incidents of childbirth of necessity entail, and that were these provided for a different future would be the result. The efficiency or the special merits of either of these suggestions we do not seek to decide. It may be that in their combination they might prove effective. We do, however, venture to affirm that the necessity for some such steps exists. It is monstrous to believe that in England—the freest, the wealthiest, the most charitable, and, we will add, the most Christian country in the world—evils of this magnitude should be recognised, and its rulers admit themselves to be impotent to provide a remedy.

Hæret lateri lethalis arundo. The vestry of St. George-the-Martyr has been greatly agitated by the sharp comments of our Workhouse Infirmary Commissioners; it has held a meeting thereupon, and the whole spirit of the proceedings on this occasion is so illustrative of the point of view from which parish officials are apt to regard themselves, and of their manner of dealing with the sick poor, that we think it worth while to preserve a short record of the business.

It appears that the report which we published in THE LANCET of July 15th, on the condition of the St. George's Workhouse Infirmary caused a good deal of excitement in the minds of the guardians; and the medical officer of health to the parish, Dr. BATESON, was authorized by the chairman and vice-chairman to institute a fresh inquiry, with a view to check the accuracy of the report of our Commission. At a recent meeting of the vestry, this gentleman presented his report; and with that report alone we propose to deal on the present occasion, or rather with the scientific questions included in it, for we are by no means inclined to meddle with the personal disputes amongst the guardians which are hinted at in sundry passages, or with the recriminations which were freely bandied about in the course of the meeting.

Dr. BATESON sums up his report with the statement that "his examination of the workhouse has left an impression on his mind far, very far, different from that produced by the report of the Commission." Naturally we regretted that this should be the case; and we turned with some curiosity to the detailed observations upon which this opinion of the medical officer of health must have been based. Now that we have carefully studied the full notes which have been furnished us of Dr. BATESON'S report, as read at the vestry meeting, we are at no loss to perceive that that gentleman's *disagreement* represents rather a *façon de parler* than anything substantial. It would not have been graceful for him as an *employé* of the vestry to tell them, in so many words, that they had been justly charged with grave derelictions of their duty; but this, in fact, is the plain interpretation of his statements, although on reviewing the report of the Commissioners he takes exception to their version of the matter in certain small details.

Dr. BATESON reviews the Commissioners' remarks—(1) on the diets; (2) on the expenditure per head; (3) on the classification; (4) on the ventilation; (5) on the watercloseta, drains, &c.; (6) on the nursing; (7) on the tramp-wards.

1. As to the diets, our Commissioners had expressed the opinion that they were deficient in the supply of animal food, and generally insufficient both for the able-bodied and the sick. Dr. BATESON'S verdict on this point is in the highest degree confirmatory of this judgment, and delivers on the sly a heavy back-handed blow at the guardians, of whom he is the official advocate; for he proves, by an analysis of the workhouse dietary, and by an apt quotation from a writer on dietetic questions, that the allowance for able-bodied paupers in the St. George's Workhouse is very greatly below that which

modern enlightenment and humanity judge to be necessary for the support of *felons in our prisons*. He does, indeed, state that he is informed that the St. George's dietary is far better than that of many workhouses, and that it is declared by the Poor-law Board to be ample. But on the first of these points we beg to state that he is in error; and with regard to the tacit sanction which the Poor-law Board has so far given to such dietaries as that of St. George's Workhouse—a point of official rather than of scientific importance—it is now universally acknowledged that the Central Administration has acted on very imperfect scientific information concerning these matters; and the recent appointment of Dr. EDWARD SMITH as scientific adviser to the Board on dietetic questions is a practical recognition of the need for improvement in the supervision of workhouse diet-tables.

2. With regard to the expenditure per head at St. George's Workhouse, we have merely to remark that our Commissioners obtained the figures which we have printed from the workhouse officials themselves; and that if there be any inaccuracy, of which we are doubtful, the fault rests with the latter.

3. Dr. BATESON is informed by the workhouse surgeon that it is not true that "classification does not exist" at St. George's Workhouse, as our Commissioners stated; but the surgeon does not deny that his attempts to carry out classification have met with but imperfect success. On this point, therefore, we have only to remark that the details given in our report are vouched for by our Commissioners as strictly correct, and that the state of things which they reveal fully justifies the statement that classification is so imperfect as to be practically "non-existent."

4. In respect of ventilation we are rather at a loss to understand the position which Dr. BATESON takes up. Out of twenty-nine wards he selects seven "at random," and measures the cubic space allowed per bed; and upon these data he proceeds to condemn as inaccurate the opinion expressed by the Commissioners that even the stingy allowance of 500 cubic feet for sick wards, and 300 cubic feet for able-bodied wards has not been maintained. This, in itself, is not a fair or scientific proceeding; but we object far more strongly to the vague statement that "various opinions are prevalent as to the quantity of air necessary for respiration and the maintenance of health;" since Dr. BATESON must be well aware that even supposing his seven wards taken "at random" afford a fair example of the minimum cubic space allowed in St. George's sick wards, this allowance is ridiculously inferior to that which any experienced hygienist would demand for the treatment of the sick. The fixed standard of the Barrack and Hospital Army Commission for army hospitals is 1200 cubic feet. It is quite obvious, however, from his own remarks on the inevitable foulness of air in the wards which must ensue when their windows are closed, that Dr. BATESON, no less than our Commissioners, regards the ventilation at St. George's as entirely insufficient; and we regret that he did not state this explicitly.

5. With regard to the waterclosets and the trapping of the drains, it is sufficient to say that Dr. BATESON'S report substantially confirms our own, except in two minor particulars. It appears that the watercloset which our Commissioners mentioned as having been *without any water-supply for one entire week* supplies the needs of only twenty instead of thirty men. (The absence of the regular water-supply is not denied, nor is it attempted to be shown that any care had been taken to flush the closet by temporary means during this period.) The other point on which our Commissioners are contradicted is on the prevalence of foul smells: the fact that evil smells certainly were present at the time of the Commissioners' inspection is accounted for by the surgeon's assistant by the statement that the dressings from a foul cancerous ulcer had just been thrown down an untrapped sink—an explanation which we leave our readers to accept or not as they please *quantum valeat*.

6. On the subject of nursing Dr. BATESON entirely confirms every word of censure which our Commissioners advance; and he makes no attempt to deny that the habit of washing in "chambers" was allowed to prevail amongst the patients, although it appears that "strict orders" have now been issued against this practice.

7. The condition of the rooms lately used as tramp-wards was severely commented on in our report; and Dr. BATESON justly considers that the charge brought by the Commissioners, that extreme recklessness of human health and life was displayed in the arrangements of these wards, was the gravest matter for the guardians' consideration. The sanitary abominations noted in our report were not, and could not be, denied; and we cannot but think it was with only half a heart that Dr. BATESON urged the utterly irrelevant plea that the tramps were naturally very dirty in their habits, and that the guardians really could not think of any better place to put them in at the time. One point urged by our Commissioners is open to question—namely, that of speculatively assigning these tramp-wards as the *principal* cause of the invasions of typhus which have been so remarkable at St. George's Workhouse; since there appears to be considerable ground for supposing that a low lodging-house or "refuge" in the neighbourhood was the source of many cases. Dr. BATESON, however, expressly allows that the tramp-wards were well fitted to produce fever.

On the conclusion of the reading of Dr. BATESON'S report, a clamour seems to have arisen in the vestry as of all bumbledom broken loose. It is impossible to dignify with the name of argument the declamations which followed, in which our Commissioners were abused and reviled in language equal to the occasion, and fully maintaining the reputation of parochialism for eloquence, moderation, and good taste; while the severest personalities were exchanged between guardians who upheld different views about the management of workhouse and other parochial affairs. The most amusing feature in the whole business was the unanimity with which all but a few of the more enlightened officials seemed to take it for granted that our innocent Commissioners, who probably had never heard of St. George's parish in their lives until we requested them to inspect its workhouse infirmary, were fully *au courant* with all the local disputes of this Little Peddlington, and had, in fact, been expressly engaged by some malignant parishioner to "spy out the nakedness of the land," and to write a damaging report upon it.

> "Oh! wad some power the giftie gie us
> To see ourselves as ithers see us!"

might well be the prayer of the guardians of St. George-the-Martyr.

UNIVERSITY COLLEGE, LONDON.—Dr. Graily Hewitt has been appointed Professor of Midwifery in the College and Obstetric Physician to the hospital.

Medical Annotations.

"Ne quid nimis."

THE VOLUNTEER MEDICAL SERVICE.

THE Wimbledon Rifle Meeting terminated with the Volunteer Review on Saturday, July 22nd; and this day (Friday) the first prize meeting of the sister society, the National Artillery Association, will be brought to a close. The volunteer season may now be considered concluded. During the next few weeks the members of our noble "army of defence" will be scattered over many parts of the globe, the healthy and manly duties necessary for their efficient training as volunteers rendering them fully capable of undergoing that physical exertion inseparable from the amusement of an Englishman.

The present season has been somewhat eventful as concerns the volunteer medical service, the Council of the National Rifle Association having departed from their medical arrangements of the past four years, and memorialized the Government to give them an army medical establishment at Wimbledon. This was done without the knowledge or consent of the volunteer medical officers. An insult most undeserved was thus offered to them in return for nearly six years' service. The duty of the medical officer does not cease after his attendance at drill, gun or rifle practice, field-day, review, or sham fight; but should an accident occur to any one of his corps, he is expected to attend that man when he returns home—an attendance sometimes lasting for months, and this without fee or reward. So soon as the announcement of the National Rifle Association was made in the "official organ of the volunteers," the medical officers of the metropolitan corps took steps to vindicate their claims, and to prevent, if possible, the War Office from complying with the requisition of the Council. The deputation who waited upon the Inspector-General of Volunteers was informed that the Secretary of War had already agreed to the memorial, and that the medical establishment had been granted. The Government could not have done otherwise. The memorial coming from the president of the National Rifle Association, himself a volunteer commanding officer, the inference was that the medical staff had agreed to the innovation.

It was suggested that an effort should be made to accord to volunteer medical officers their just position at the volunteer review which was to follow the prize meeting; and, considering the duties and inclination of the profession, the movement assumed really an extraordinary character. A partial victory was obtained: although the army medical staff was to be upon the ground, the volunteer medical officers were to attend to the treatment of their own men, and the Government stores were to be at their disposal. It will be seen by reference to our report of the casualties at the late review, that each surgeon accompanied his injured man to the field-hospital, where he carried out the necessary treatment. In one case, Surgeon Gowlland, of the Hon. Artillery Company, stayed all night with his patient, having the entire charge of him. We cannot refrain from mentioning that the army medical staff behaved most considerately in the extremely unpleasant position in which they found themselves upon the review day.

It has been hinted that the volunteer regiments should be supplied with half-pay army doctors, appointed like the adjutants, so that their attendance upon their respective corps might be compulsory. This arrangement could never be satisfactory to the commanding officers generally, nor indeed to the volunteers themselves. It would be in direct opposition to the principle upon which this great national movement is based.

The committee of the volunteer medical service is adjourned until the first week in October. It will then proceed to carry out the resolution passed at the meeting of volunteer surgeons at the Grosvenor Hotel with reference to the formation of a medical establishment.

RAILWAY INJURIES AND SPECIAL JURY DAMAGES.

WE could hardly name a subject of greater practical importance than that dealt with in the elaborate and thoughtful letter addressed to us by Mr. Skey on compensation for railway accidents, and medical evidence. This class of cases occupies now a large part of the time and attention of many surgeons and physicians in leading practice, and frequently public attention is arrested by some "great case," where heavy damages are claimed—where the claim is strenuously resisted by the company—where conflicting medical witnesses appear in hostile array, and usually the full amount claimed is awarded by a perplexed and sympathetic jury. To these displays a good deal of scandal attaches, and Mr. Skey, with a large experience in railway compensation cases, justly complains of the unsatisfactory nature of the tribunal to which points chiefly involving medical testimony are submitted. There is, no doubt, great cause for this complaint, and good reason to inquire whether a better plan cannot be devised.

It is well to remember the origin of these cases in the gross, and to learn their general history before arriving at any dogmatic decision. Persons who have been injured on railways smart not only under the hurt they have received, but under the sense of wrong arising out of the reflection that their suffering is due to the carelessness of the officials. When, after a time, the subject of compensation is discussed, any attempt, real or apparent, to underrate the injury which has been inflicted, naturally stimulates them to protect themselves by stating to the fullest extent the symptoms from which they suffer, and they seek the opinion of medical men, before whom they lay their case. This, on the other hand, calls forth the energies and exertions of the company, who send medical men to strip the case of its exaggeration, and who are charged to reduce it to its narrowest limits. How, then, are these conflicting interests to be reconciled? This is the problem to be solved.

We may say at once that we fully believe that the great majority of these cases are satisfactorily settled by the best kind of arbitrament, and that in a large number of instances justice is done by able and intelligent medical men meeting together, balancing the various sides of the questions at issue, examining the patient, and finally agreeing upon an equitable compensation. It is, in our opinion, important to bear in mind that this is the course pursued in many cases, and we believe that the results thus arrived at are very just and satisfactory to all parties. Mr. Skey's letter fails in grasping the whole view of the case precisely, because it omits to regard this phase of the present method of conducting railway compensation cases. Nevertheless this is the rule, and it must be fully borne in mind if we would wish to deal satisfactorily with the exceptions. It is in itself an ex-official scheme of arbitration, and probably some half-dozen surgeons, including especially Mr. J. Adams, Mr. Coulson, Mr. Lawrence, and Mr. Solly, have settled ten times more claims than all the juries in England. To verify this statement it is only necessary to recall the immense sums which have been paid after some great recent catastrophe, on the award of the medical referees, without any legal processes in court. After the great accident at Egham, for example, from £40,000 to £50,000 was paid without one case going into court. Of the recent Staplehurst cases of injury requiring compensation, not one has yet gone into court.

Unfortunately, however, cases such as those specially referred to by Mr. Skey occur from time to time in which there is great contrariety of opinion. Such cases generally run a course in court which is unfavourable to the character of the

medical profession, generally speaking adverse to the interests of the railways, and probably ending in damages beyond what are demanded by a strict sense of justice. Mr. Skey quotes three important cases. In one, a man declared to be not permanently injured was awarded £5000 by the jury when he would gladly have accepted £3000 before the trial. In another case, all parties were agreed that the plaintiff was seriously injured; and the question was as to the relative duration or permanency of the injury. The jury accepted the estimate on this head of the eminent men called for the plaintiff, and awarded him a sum, calculated on the basis of a life-table, to provide him with a suitable annuity. We see less reason to find fault with that verdict than does Mr. Skey; and it is at any rate well to remember that in that case the distinguished judge presiding complimented the medical witnesses on their general bearing, and on the honest accordance of their opinion on the main features, and characterized the differences as by no means discreditable or inexplicable. His observations contrasted strongly with those made from the bench in the previous week on the conflicting testimony of engineers, who had to testify to matters far less speculative than the interpretation of puzzling symptoms occurring after a severe injury to the nervous system, and the prognostication of their probable duration.

Taking these cases, however, at the best, or at the worst, they testify to this fact: that ordinary courts of law, and the ordinary conduct of legal cases by barristers and solicitors before a lay jury, do not afford a satisfactory means of testing the amount of injury done to individuals who suffer from accident. We have pointed out that this is virtually admitted by the constantly increasing tendency to refer such cases to the final arbitration of competent medical men, acting on either side. In those cases where the matter could not be so settled, we have seen no better plan hitherto suggested than that which was broached by a commission* that a few years since reported in our columns, and which we have frequently urged. It is nothing else than the appointment of permanent medical assessors in the courts of law, whose business it should be to examine the plaintiff, to hear the medical opinions on either side, and to report thereupon to the court; their report alone being received in court on the medical aspect of the case. Of course such assessors should be bound not to take any private interest in cases of railway origin. They must, in fact, preserve a position of the most rigid impartiality. It is the present scandal of compensation cases, whether medical or of any other kind whatever, that the experts appear more or less as advocates. The effect of submitting the scientific evidence to assessors, who would prepare for the court a detailed report, would be the termination of this evil. Meantime we would have all railway companies continue to settle as many cases as possible out of court; and we would earnestly beg of the "eminent medical men" who appear in court, whether for plaintiffs or defendants, to free themselves as far as possible from the unpleasant reproaches often hurled at them with more or less justice.

THE ASHBURTON POISONING CASE, AND ITS MORAL.

THE legal evidence in this case which could connect the crime of poisoning with its perpetrator was wanting. There could be no doubt of the fact that an attempt had been made at wholesale poisoning by a deadly alkaloid. The symptoms during life, and the result of the tests applied after death, were equally characteristic of that most mortal poison, atropia—the active principle of the deadly nightshade. The medical men consulted acted throughout a proper part, and their evidence was given in a satisfactory manner, as the judge testified. It is not the less distressing that a medical man should have appeared once again in the dock charged with the crime of secret poisoning, although the evidence was quite insufficient to convict. The singular statement made by a Dr. Bradshaw at Marylebone Police-court on Wednesday shows sufficiently the sort of impression which such crimes create. His cook, an hysterical woman, who had received wine and medicine while in his house, left him; and soon afterwards he received a message to say that she was dying. She was, in fact, in good health, but had fancied herself dying from a slow poison secretly administered, and had, it is said, for a moment deceived a doctor who had been called in. The magistrate's comment was: "Who on earth would poison a cook when she could be discharged at any time? As a rule, hysterical people were full of vagaries, and they would be affected nervously." It is worthy of notice that the absence of motive supplied the most effective point in that judicial comment. It is, however, especially important to notify that each day proves more conclusively that poisoning by these alkaloids, which have been so much feared and are so deadly, is cognisable by the most precise and unerring symptoms and tests. Atropine, aconitine, digitaline—all are recognised by their characteristic effects during life, and by the physiological test after death. Thus in this Ashburton case the dilatation of the pupil following the application of a solution of the pie-crust was more eloquent of atropia than the most striking colour test could have been. Let it be known on all sides that physiology has supplied a test for vegetable poisons as delicate and unerring as the most perfect chemical tests for the coarser mineral poisons.

* Report of THE LANCET Sanitary Commission on the Influence of Railway Travelling upon Health.

FOREIGN DIPLOMAS.

THERE is a halo of mystery around foreign diplomas which it may be well to dispel, and a few words will answer the many questions of inquiring correspondents as to the respective value or registerable character of diplomas held sometimes by themselves and sometimes by obtrusive neighbours. Oddly enough, no list of the diplomas which have been registered by the Medical Council has hitherto, so far as we know, been published, and we have been at the trouble of collecting the facts for present information and future reference. The following list of foreign diplomas which have been registered by the Medical Council may be accepted as complete and accurate:—Paris, Berlin, Vienna, Leyden, Pavia, Leipsig, Heidelberg, Wurzburg, Munich, Giessen, Erlangen, Rostock, Strasbourg, Brussels, Bonn, Zurich, Göttingen, Lisbon, Pisa, Montpellier, Gröningen, Jena, Malta, Prague, Tübingen, Palermo, Catania, Wilna, Padua, Granada, Seville. *American:* Castleton Medical College; Willoughby College, Ohio; Maryland University; College of Physicians and Surgeons, New York; St. Louis; Georgetown; New York University; Jefferson College, Philadelphia; Geneva, U.S.; M'Gill College, Montreal; Pennsylvania College; Michigan College, U.S.; New York Medical College; Yale College, U.S.

After this it will hardly be said, we apprehend, that the Council have not been sufficiently liberal and elastic. They have not, however, proceeded without precaution. First and foremost, before the Council registered any foreign diploma, they determined that the registrar should, in a set form, write a letter to the deans of the Medical Faculty, asking under what conditions persons were admitted to their several examinations, the courses of study required, and similar details; and requesting a copy of their regulations.

MEDICAL ASSOCIATION OF BELGIUM. — This very useful and now powerful Society reckons at present 1000 members out of the 1800 medical men composing the whole medical body of Belgium. More than one hundred delegates were present at the general assembly held at Brussels in June last. It was then decided that efforts should be made to obtain a national reward for Dr. Willems, the originator of inoculation in the treatment of the peri-pneumonia of cattle.

THE DISEASE AMONGST HORNED CATTLE.

JUST when we were becoming sensible of the increasing value and scarcity of the "nitrogenous forms of food"—to wit, meat and milk, and anxiously casting about for some substitutes for them, an event has happened calculated greatly to strengthen the impression that we are inconveniently and dangerously dependent upon cattle. A very fatal epidemic has broken out in certain dairies of London, and has already occasioned great ravages. Its first appearance would seem to have been about the 27th of June in a dairy in Islington, where, we are informed, 110 cows have died. It originated here with six cows that had been recently imported, and bought in the Metropolitan Cattle Market. They were kept in a quarantine-shed for some time, but other cows were admitted to this, and the disease spread to the healthy stock of the owner. It is the price we pay for not having a paternal government, that a great evil like this may steal into the land, radiate from a centre in all directions, and impress the authorities with its presence only when it has become impracticably great and extensive. We have said that it appeared first in London about the 27th of June, and not till a month after, or about the 27th of July, was any notice taken of it by the Government. Meantime, of course, it had spread in various directions. Owners of doubtful or diseased cattle, seeing that their only chance of saving themselves from the probable loss of all their stock was to sell, took such cattle to the market, and sold them. Accordingly the disease has already been traced in various places in and about London, and would seem to have appeared in Yorkshire and Warwickshire. Professor Gamgee reckons that 2000 head of cattle have already been destroyed. All of a sudden, thanks to the Professor, everybody concerned seems to have become alive to the seriousness of the matter. The cowkeepers are in great consternation, for the disease is at once most fatal and most contagious. The public are not less interested in the malady than the cowkeepers, for, if not checked, it will cause a great rise in the value of meat, which is always apt, indirectly, to lead to typhus and other epidemics. The disease does not affect the human subject, though it can be transmitted by us from animals affected by it to healthy ones. The veterinary faculty, which is becoming more and more scientific every year, feels that its utility is being subjected to a great test. And last, but not least, the Government feels that the evil existing and threatening is too serious to be left entirely to itself, or to parties directly concerned in it.

Our readers will be interested in the medical features of the disease. We subjoin an account of it by Professor Gamgee. It is analogous to our typhoid fever, and if the differentiation of fevers were as advanced in the veterinary department of medicine as it is in our own, it would probably be called typhoid, or enteric typhus. And yet the analogy is only imperfect. There is a corresponding appearance of the mucous membrane of the intestine and of Peyer's glands, answering to the diarrhœa which obtains during life; but there is an emphysematous condition of the lungs and other organs. A more important difference is in the greater contagiousness of the disease in the case of cattle. Some of this may be due to the fact that cleanly and sanitary measures are not so much practised in their case as in that of human beings. Be this as it may, the discharges from the diseased animal are intensely contagious, and the only chance of curtailing the spread of the disease is by destroying affected animals, and by a rigid system of isolation, for the enforcement of which the Government, in the last resort, will be held deeply responsible. It may be true, as Prof. Gamgee says, that it is best for the cowkeepers to "help themselves," and to be independent of the Government. But this will not exonerate the authorities from the duty of seeing that all possible care is forthwith taken to stop the sale and the dispersion of cattle from suspected parts either of England or the Continent, and of cattle with symptoms of this terrible disease upon them. This is one of the few points in regard to which our Government might find a lesson in the action of more despotic ones. The following is Professor Gamgee's account of the epidemic:—

"The Steppe Disease—Russian Cattle Plague—Contagious Typhoid Fever of Cattle—Typhus Contagiosus Bovum.

"This terrible disease, so peculiar to the ox tribe that the Germans call it 'rinderpest,' is a very contagious fever, characterized by specific lesions of the intestines similar to those of enteric fever in man. It originates invariably in Asia or the Russian steppes; and though confined to the bovine species, and only rarely affecting sheep, it attacks cattle of all breeds with equal virulence. It spreads somewhat slowly, and is not very fatal where it originates as an enzootic; but it is propagated very rapidly, and is the most fatal of all cattle plagues when it passes into central Europe.

"Fortunately for us the contagious typhus is much dreaded in the countries with which, at all events indirectly, we are in communication. Cattle have to travel several days to reach Hamburgh or Rotterdam from the eastern portions of Austria and Prussia. The disease has a short period of incubation, and is characterized by alarming symptoms which warn people early of its outbreak. It is not so insidious a disorder as pleuro-pneumonia. It is not seen in a latent form, and cannot so readily penetrate a country unobserved. Notwithstanding all this, we must not forget that annually there are exposed in the Altona and in the New Islington Market, Podolian and Hungarian oxen. It is true that these are fattened at the distilleries of Austria and Prussia, but they come from districts not very remote from those where the contagious typhus has appeared within the last two years. If Russia became engaged in war with Prussia or Austria, and our import trade continued as at present, I think it would be impossible to avoid an importation of this terrible disease.

"We must not forget that it appeared in Turkey and in the Crimea during the Crimean campaign. Its outbreak then was only in accordance with the circumstances under which similar outbreaks occurred last century as well as this one, and similar circumstances endangering this country still more may again recur.

"*Symptoms.*—The period of incubation during which there are signs of disorder, lasts from four to eight days. It may be as short as twenty-four hours, and sometimes, but very rarely, of nine or ten days' duration.

"The first signs consist in dulness, prostration, and a short husky cough. The appetite is not lost, but is irregular; rumination is also slow and irregular. The animal grinds its teeth, yawns, arches its back, draws its legs together under its body, and manifests tenderness of the loins.

"A fever shiver ushers in the third stage. The animal becomes hidebound, its coat stares, there is still greater tenderness of the lumbar region. The gait is stiff, joints rigid, ears and horns alternately cold and hot; pulse frequent, hard, and full; breathing laboured, and secretions generally scanty. Rumination is suspended; deglutition performed with difficulty; thirst intense, and mouth hot and clammy. The drooping ears, extended head, spasmodic jerking of the muscles of the body are very characteristic. There is a watery discharge from eyes and nose. The eyes are bloodshot, eyelids swollen, and soon encrusted with the dried inspissated secretions from them. The lips are also somewhat swollen, partially closed, and allowing saliva to drop out of the mouth. If blood is drawn, it coagulates slowly, and sometimes not at all. The dry excrement and high-coloured urine are scanty, and discharged with some difficulty. The abdomen is tense and tender. In cows the secretion of milk is stopped, and the udder is flabby and shrivelled up. In some cases, general emphysematous swellings form at this period, and there are exacerbations of all the symptoms towards night-time. This stage lasts about three days.

"The symptoms increase in severity. Diarrhœa supervenes, and the animal is extremely weak. It stands and walks with difficulty, and lies much. The pulse becomes weak and indistinct at the jaw. It beats from 90 to 100 per minute. The discharge from nose and salivation increase. The cough becomes less audible and soft. On the buccal and Schneiderian membranes, as well as in the clefts of the feet, a vesicular eruption is often seen. Ulcers result wherever the vesicles burst.

"The coldness of the extremities or of the body generally, the stupor or drowsiness, quick breathing and tetor of the exhalations, with spasmodic action of the alæ nasi, and moaning,

are amongst the most unfavourable symptoms. There is often an involuntary discharge of fluid fæces, more or less tinged with blood. Cows abort, and all symptoms of sensibility or consciousness are lost. The animal dies from the third to the tenth day of the development of the disease.

"In favourable cases there is an early diminution in the severity of the symptoms; the diarrhœa is not severe, and there is a pustular eruption over the body, or a desquamation of cuticle. The convalescence is long, and may last several weeks.

"*Post-mortem appearances.*—These have been very carefully studied and described by Dr. Röll, of the Vienna Veterinary School, Jessen, Spinola, Brefeld, and others. The lesions are peculiar in three different stages.

"In the first, or catarrhal stage, the mucous membrane of the fourth stomach, especially near the pylorus, as well as the lining of the small intestine, is swollen; there is a uniform colour or redness around the glandular follicles, and red spots or streaks on the membrane. The neighbourhood of the glands—both solitary and agminated—is red, swollen, and open. The surface of the membrane is covered with a viscid, tenacious, reddish or bloody secretion, which is more or less mixed with the intestinal contents; and in the submucous tissue there is a turbid semi-fluid exudation. In the large intestine the lesions are few. There is a general redness of the cœcum, as there is of the mucous membranes in other parts of the body, such as in the sinuses of the head, in the trachea and bronchial tubes, urinary and generative organs. The lesions of the first stage, says Röll, are not characteristic of the disease, as they indicate a catarrhal condition of the stomach and intestine which may exist in other diseases; but coupling the above lesions with the history of a number of similar cases occurring one after another in any place, they may materially assist in determining the nature of the disease affecting any stock.

"In the second stage the morbid lesions are more characteristic. There are numerous patches of yellow exudation, most abundant in the neighbourhood of Peyer's patches, but also seen in the fourth stomach, near the pylorus. In the latter organ, the dullish red or violet-coloured patches, where the membrane is thickened considerably, occur chiefly towards the free edges of the mucous membrane. The deposit occurs beneath and around Peyer's glands, and is then of a yellowish brown or reddish tint. The glands have a perforated appearance, and at all of the apertures there are little yellowish white plugs of exudation, which are readily squeezed out. In the vicinity of these deposits there is a sort of catarrh or secretion from the mucous membrane.

"In very severe cases the free surface of the mucous membrane of the small intestine, extending over one or more feet, is covered by a discharge of a greyish or dirty-red colour. A similar slimy secretion is seen in the cœcum sometimes, as well as in the colon and rectum, where there may be redness of the mucous folds, which is apt to be mistaken for excoriations.

"In some lean-conditioned animals the exudation on the surface of the mucous membrane is not seen. There is a tenacious, albuminous, yellowish-white or reddish-brown fluid deposited in or beneath the mucous membrane of both small and large intestines. Peyer's glands seen thus, appear swollen and perforated.

"In the third stage, the exudations before referred to get loose from their periphery towards the centre. They become soft, and when still adherent at the centre, especially at the seat of Peyer's patches, there are floating masses of this exudation, which at last get quite free, and are discharged with the excrements. The portions of membrane from which these sloughs have separated are red and ulcerated, but the ulcers are not usually deep.

"In a Russian report on this disease,* two coloured plates have been given, showing the ulcerated glands of Peyer, ulceration of the membranes of the stomach, and the sloughs found free in the intestines.

"The other organs of the body do not indicate any specific change. There is more or less redness and tumefaction of all the mucous membranes. The heart is soft and flabby, the lungs normal or slightly congested, the liver is of a dark colour, and its ducts and bladder full of bile. The kidneys are red and swollen. Spleen healthy, and nervous centres unchanged.

"The mesenteric glands are apt to be swollen, and contain a yellowish-red exudation, and may attain twice their natural size.

* Bericht über die ersten Impfungen der Rinderpest, &c. St. Petersburg, 1854.

"*Nature of the Disease.*—The post-mortem appearances just described correspond remarkably with those of typhoid enteric fever of man. I long since noticed this fever, reading carefully the best descriptions published of it; and suggested that, instead of calling it contagious typhus, it should be called contagious typhoid or enteric fever. Some of the older authors regarded the malady as an impaction of the third stomach, and hence called it Löserdurre; but the distension of the omasum with solid food is usually seen in all diseases of ruminants, and not always in the cattle plague.

"Different observers have given a very different account of the nature of this disease, as indicated by the many names applied to it, such as Magenseuche, Gallenseuche, Uebergalle, Grossgalle, bösartiges Ruhrfieber, and so on. The disease is certainly not a form of typhus, and, so far as I can learn, the only real difference between it and the enteric fever of man is its plague form and exclusively contagious character. Fortunately for us, it is not enzootic here, and, like pleuro-pneumonia, epizootic aphtha, and variola, spreads exclusively by contagion.

"*Treatment and prevention.*—The curative treatment of this disease has failed as a rule. Preparations of chlorine, iron, or neutral salts have been used, and only with success in mild cases, and especially in Russian cattle.

"The prevention of the disease when it is known to originate spontaneously, or to exist constantly, is sometimes attempted by inoculating the cattle—a practice recommended first during the last century, when the disease appeared in Britain. When, however, the disease enters a country like our own, it is proper and prudent to kill out the diseased and infected animals, and prevent contagion by all known means."

THE PROGRESS OF CHOLERA.

THE latest news from the districts infected with epidemic cholera shows that the disease, while still declining in Alexandria, Cairo, and the vicinity, is increasing in Constantinople. On the 26th ult. the number of deaths from cholera in Alexandria had fallen to 2, and in Cairo to 38. On the 31st the mortality from the disease in Constantinople and the villages on the Bosphorus was 160, the average daily number of deaths prior to that date not exceeding 45. News from Beyrout of the 8th July states that four cases of suspected cholera had occurred in that town, and that the inhabitants were flying to the hills. Nine cases of the malady had occurred among the 4000 passengers landed at Jaffa and Beyrout, arriving from Egypt. The consuls and medical officers of the town had recommended that additional shelter should be provided for passengers under quarantine, and a sanitary service instituted for the benefit of the population. They had also recommended that apothecaries who, neglectful of their public duties, had abandoned their shops and fled from the town, should not be authorized to open such shops for the future.

The same account also states that the plague of locusts in the district surrounding Jaffa is not yet ended, and that the plains about Ramlah a few days ago were suddenly covered with swarms of frogs.

Smyrna is infected. From the 24th of June to the 21st of July, 232 deaths from cholera had occurred there.

Athens has established a strict quarantine against ports infected with cholera in the Mediterranean; and news from that city dated July 20th states that the Government had received advices of cholera having appeared in the town and lazaretto of Malta.

News from Ancona states that cases of cholera still occur in that town, although "the malady has not the violent character which it has presented in Egypt." On the 22nd ult. three deaths happened in the city from the disease; and from noon of the 25th to noon of the 26th five deaths.

Damietta has suffered severely from the epidemic. Few cases have been reported at Suez; and none, it is believed, have occurred in Upper Egypt. The recent outbreak is the sixth irruption of epidemic cholera in Egypt. Previously, it prevailed there in 1831, 1838, 1848, 1850, and 1855.

The maximum mortality in the present epidemic occurred in Cairo on the 4th of July, when the deaths from cholera numbered 457; and in Alexandria on the 3rd of July, when the deaths amounted to 228. The total mortality from the disease in Cairo from June 20th to July 17th, according to

official reports, was 5249; in Alexandria, from June 12th to July 23rd, 3975; and in Damietta, from June 26th to July 9th, 1485. The population of Cairo is estimated at 400,000; of Alexandria, 175,000; and of Damietta, 40,000.

The following returns are from the official records:—

Number of Deaths in Alexandria, according to the Daily Official Bulletins, since the appearance of the Cholera.

	From Cholera.	Other Causes.	Total.
June 12	3	44	47
13	12	38	50
14	34	30	64
15	38	17	55
16	34	29	63
17	53	28	81
18	61	30	91
19	94	21	115
20	101	51	152
21	159	42	201
22	145	36	181
23	159	39	198
24	141	37	178
25	183	50	233
26	193	48	241
27	208	50	258
28	214	45	259
29	209	43	252
30	197	40	237
July 1	184	25	209
2	195	23	218
3	228	37	265
4	176	40	216
5	118	39	157
6	132	44	176
7	142	35	177
8	94	29	123
9	91	31	122
10	64	37	101
11	55	44	99
12	61	33	94
13	48	33	81
14	21	41	62
15	23	45	68
16	22	45	67
17	21	33	54
18	18	37	55
Total, from June 12 to July 18, inclusive	3931	1369	5300

The deaths from cholera during the succeeding five days, July 19—23, have been returned as follows: 10, 12, 10, 8, 4.

Number of Deaths in Cairo, according to the Daily Official Bulletins, since the appearance of the Cholera.

	From Cholera.	Other Causes.	Total.
June 20	2	46	48
21	2	52	54
22	2	68	70
23	3	52	55
24	17	55	72
25	25	71	96
26	71	74	145
27	85	93	178
28	93	75	168
29	136	65	201
30	216	84	300
July 1	329	77	406
2	306	90	396
3	382	112	494
4	457	84	541
5	356	63	419
6	355	82	437
7	365	87	452
8	389	90	479
9	347	97	444
10	232	103	335
11	226	84	310
12	204	98	302
13	156	97	253
14	149	104	253
15	151	101	252
16	109	89	198
17	64	107	171
Total, from June 20 to July 17, inclusive	5249	2300	7549

At Damietta:—

	From Cholera.	Other Causes.	Total.
June 26	1	1	2
27	10	7	17
28	35	4	39
29	54	4	58
30	67	8	75
July 1	93	6	99
2	107	8	115
3	141	7	148
4	157	8	165
5	172	6	178
6	171	11	182
7	169	13	182
8	166	11	177
9	142	9	151
Total, from June 26 to July 9, inclusive	1485	103	1588

MEETING OF THE BRITISH MEDICAL ASSOCIATION AT LEAMINGTON.

THE meeting of the General Council took place at noon on Tuesday, and the business of the Association commenced at eight P.M. with the first general meeting, in the great hall of the College, at which there were about 150 of the members present.

Dr. PAGET, the retiring President, took the chair, and delivered a short address, in which he expressed his wish that joy and prosperity might attend the Association. He congratulated the Association on its financial and social prosperity, and on its meeting in such a famous health-resort, where, under the genial guidance of the new President, they might observe the aids to the restoration of health which there existed; the contemplation and enjoyment of which were as truly remedial as many of the articles of the Pharmacopœia. He referred not only to the mineral waters, but also to the cheerful walks, the charming scenery, and the various objects of interest with which the neighbourhood abounds. He heartily thanked the Association for all the courtesy shown to him during his term of office, which he should hereafter hold in grateful remembrance. He congratulated Dr. Jeaffreson on the attainment of one of the highest honours bestowed by the medical profession.

Dr. JEAFFRESON acknowledged the compliment, and expressed his feelings of gratification at filling the office of President, which he would do to the best of his ability. He cordially welcomed the Association to Leamington, and hoped that the session would be both pleasant and instructive.—Dr. Jeaffreson then delivered the opening address. It was an elaborate essay on Baths and Bathing. He took a review of the subject from the period of the Greeks to the present time; and spoke of the various forms of baths which had been in fashion. Dr. Jeaffreson also spoke of the advantages of sea-bathing, of the value of the Turkish bath, and the influence of mineral baths on health and disease. He gave a brief sketch of the therapeutical effects of many English springs; and finished with an elaborate and interesting account of those at Leamington.

Mr. WILLIAMS (the Secretary) then read the report of the Council, which, after congratulating the Association on the restored health of Sir Charles Hastings, stated that the number of members on the books in 1864 was 2400. During the year 30 died, 65 resigned at the commencement of this year, and the Council, in accordance with Law 16, have erased the names of 70 members for non-payment of arrears. This year 133 new members have been added, so that the Association now numbers 2368. Thanks were due to the secretaries of branches and to the editor of the *Journal* for their valuable services. The following is the financial report for 1864:—The accounts have been audited by Dr. Melson and Mr. Hadley, and they find that after payment of all bills due from the Association, the Treasurer held a balance of £243 16*s.* 8½*d.* on the 31st of December, 1864; whereas in December, 1863, there was a balance of £8 0*s.* 3½*d.* due from the Association to the Treasurer. This result is the more gratifying as some extra sums have been paid not of an ordinary kind, which have added to the amount of the expenditure. The following is the statement of the accounts:—Receipts: Subscriptions with advertisements and sales,

£3134 13s. 6d. Payments: Balance due to Treasurer, £8 3s. 0½d.; *Journal* expenses, £2566 3s. 5d.; Executive expenses, £315 10s. 4d.; balance, £243 16s. 8½d. Total, £3134 13s. 6d. Charles Hastings, Treasurer. The memorial presented to the Council of the College of Surgeons in favour of proxies for fellows had been met by a negative reply. It was recommended to persevere. The Council had directed a memorial to the First Lord of the Admiralty and the Secretary for War on Public Service to be prepared and laid before the meeting, for approval, before presentation. Poor-law Medical Reform has made but little actual progress in the past year, but the Council thinks that there is a disposition to a more friendly feeling to the Poor-law medical officers, and suggests that a committee be formed to report on the proceedings of the Poor-law Board. The Council congratulated the profession that a member of the medical body has been added to the list of the Poor-law inspectors, Dr. Edward Smith, F.R.S. Discussion was invited on the subject of the Charter, which would cost £300. Since the last annual meeting the Medical Provident Society had been established. A report would be presented by the Board of Directors. The Medical Benevolent Fund had continued its useful work with increased efficiency, having during the past year obtained considerable additions to its funds. To Mr. Toynbee and his fellow-labourers a large debt of gratitude was due from the Association. The adjudicators have awarded the Hastings Prize Medal to Dr. Herbert Barker, of Bedford, for an essay on deodorization and disinfection.

Dr. Falconer of Bath moved, and Mr. Husband of York seconded, a cordial vote of thanks to Dr. Paget for his able conduct as president during the past year. This was acknowledged by Dr. Paget in an appropriate speech.

Dr. Henry read the report of the Medical Provident Fund, which showed that the scheme was in a very prosperous condition.

After a somewhat desultory discussion respecting the election of officers and the position of the Provident Society with reference to the Association, the meeting adjourned, having elected Dr. Richardson and Mr. Clay president and vice-president of the Society.

Correspondence.

"Audi alteram partem."

COMPENSATION FOR RAILWAY INJURIES.

To the Editor of THE LANCET.

SIR,—The enormous sums of money recently awarded by juries in several cases of railway injuries may well rouse the attention of our profession, and, indeed, of the community, to verdicts which astonish the bar, the bench, and the medical witnesses themselves engaged in the inquiry.

In a former letter written on this subject I endeavoured to point to the all but impossibility of obtaining a just verdict by a jury in a case of injury involving the conflicting opinions of medical men ranged on opposite sides of the question at issue. These late decisions have confirmed my strong impression that justice to either plaintiff or defendant, in a court of law, on such terms, must almost necessarily miscarry; that a jury of men, however honest, whose dictum may be beyond appeal in questions of criminal or commercial law, is utterly incompetent to deal with cases of compensation for injuries, real or supposed, arising out of railway accidents. Trial by jury may be an invaluable institution, but it is perverted and discredited in these appeals, in which its members have to run the gauntlet through the professional discrepancies of the medical witnesses, still more distorted from the line of truth by the ingenious misconceptions of the forensic advocate, who, by a system of what is not inaptly termed cross-examination, endeavours to weaken the force of an honest statement or opinion by ignorant attempts to analyse and comment on it. This function is that of a pathologist, not of a lawyer. Reverse the relations between the parties. Could the pathologist or the surgeon exhibit anything but ignorance by cross-examining a lawyer on a professional statement, or an opinion deliberately made by him? The absurdity of the latter case is not greater than that of the former. These cross-examinations by men ignorant of our science, or rather examinations at cross purposes, the object of which consists, not in eliciting truth, but in weakening the value of the witnesses' evidence, constitute a very injurious element in any deliberate inquiry into the present condition and future prospect of the claimant. When a medical witness has concluded his evidence in chief, he is supposed to have said all he has to say, and any further inquiry into the nature, or in explanation, of his opinions should be made by the judge and not by the counsel. The former has a direct interest in promoting truth and detecting error, the latter has none beyond that of upholding, *coute qu'il coute*, the interest of his client.

With such contradictory evidence juries may well become bewildered; any attempt to do justice is vain. How can they judge between parties, one of whom has declared that the life of the plaintiff is in jeopardy, that his recovery, or his ability to resume his former occupation is hopeless, that starvation and pauperism await himself and his young family; while by the other the assurance is given with equal confidence that the injuries are temporary and not permanent, that his present condition is aggravated by his anxiety, and his health often damaged by the medical discipline he has undergone. The jury, failing in the means of ascertaining the truth, adopt, under the difficulty, the next alternative—viz., that of at once giving such compensation to the injured man as shall cover all contingent injury, present and future, while at the same time they resolve, for the benefit of future sufferers, to give a lesson to railway companies on the recklessness of their management. One of the most agreeable positions a man can occupy is that of being generous at another's expense. They rightly argue that a £1000, more or less, is of little moment to a rich company, their sympathy for the injured man, roused into being by the overcharged statements of his counsel, weighing heavily in the scale. They ignore absolutely and entirely the testimony of experienced witnesses, and astound the court by awarding damages far in excess of the most reasonable expectations of all parties concerned, by the delivery of a rampant verdict intended to strike terror into the hearts of all negligent directors, and they settle the differences of the doctors by providing for the plaintiff for life.

I have in my mind the recent decision of three juries, who awarded to plaintiffs sums of money so large as to astonish the plaintiffs and their friends. The first of these cases was an action against the Great Western, brought by a publican, or a small wine-merchant. The jury consisted of the townspeople and personal acquaintance of the plaintiff. The legal advisers of the plaintiff estimated the injury done at, and would willingly have accepted, the sum of £3000, presuming the man to be injured for life. Five competent medical men stated their conviction that the man was not injured for life. This evidence was surely worth something, but the jury gave a verdict, not of £3000, but of £5000. The second was a case in which £5500 was awarded against the opinion of five eminent medical men. In the third case, the plaintiff was seriously injured. His complaints were honestly represented; and, so far as his statement went, were free from exaggeration. I do not deny that the statement was backed by eminent medical authorities, some of whom expressed doubts as to his ultimate recovery, he having been for some ten months disqualified for his duties as a drawing-master. Be it observed that during this period his treatment had been wholly conducted by homœopathists. Three members of the fraternity gave learned evidence in court touching his malady, present and prospective. They, like others, were "men of experience" in these kind of accidents—at least, so they asserted. This plaintiff was visited on the day before the trial by three hospital surgeons of real experience in railroad accidents. We felt there was no evidence to warrant us in concluding the symptoms indicative of permanent injury, for, although the man was still incapable of resuming his work, the very variety and eccentricity of his pains told rather against than for the presence of organic disease. When a man assures his surgeon that he "can't shake his head without feeling liquid in it;" that his brain, "when he is frightened, feels as though clutched, and the life escaping out of it;" that he has "cobwebs on his face," that he has "soreness and throbbing about the spine," and that "news produces numbness of the arm and leg;" that he has "fluttering and trembling at the base of the brain," while he acknowledges himself to have a *ravenous* appetite for food, is proved to have a steady, regular pulse of about seventy, and to have maintained his full weight (that of a large man), throughout his illness;—when one listens to these statements, to which may be added a multitude of others of a similar character, one may be pardoned one's scepticism as to the real existence of formidable disease, and

permitted to ask whether the balance of evidence may not weigh heavily in the scale of hysteria, that ill-understood, unrecognised, and mysterious condition of the health which is due to a derangement in the functions of that portion of the vital economy we term the nervous system. Here is a man of some twelve or thirteen stone weight, who is supposed to have existed ten months, eating, drinking, sleeping, losing no weight, without medical treatment, and breathing an atmosphere of homœopathy, reduced in diet by the loss of wine and good beer, to which latter beverage he had been moderately addicted before the accident, and always fretting with anxiety about himself and his future. What are the probabilities of the issue in such a case under good medical management? These cases are numerous enough, and experience and observation have repeatedly traced them in the path of recovery. Do we see these men victims of railway injuries of this character in after life? Assuredly not. Of course, I don't speak of physical injuries to the limbs, of fractures, dislocations, &c.; I refer to those mysterious affections that derange for a time the economy of the nervous system, and of which I may affirm that the less the experience of the surgeon, the greater his confidence in the result, and he is a valuable witness for his client who will tell a jury that the injury of the plaintiff is a permanent one. In the case in question, such opinions were plentiful, and, although an assurance of the great probability of the man's recovery was given by several men of unquestionable experience, the jury took the case entirely into their own keeping, virtually ignored the evidence for the defendants, and gave the plaintiff the full amount of an insurance on his life at forty-three, awarding him the moderate sum of £6300. Had there been no evidence for the railroad whatever, and his recovery impossible, the damages could scarcely have been greater.

I think it may be deemed an acknowledged truth in medical practice, where two authorities are ranged on opposite sides of a case in which a question is raised involving the existence on one side, or the absence on the other, of a given disease, that truth rests with the advocate of the latter, presuming, of course, the same evidence to be accessible to both. To suppose one man capable of detecting a disease which another of equal tact and discernment cannot see, is to give to the first authority a marked advantage over the latter; and practically we observe this truth daily. It is not an example of defective observation, but of defective judgment charged against *him* who declares the disease is not; because the opinions of his colleague in the inquiry are made known to him, his attention is called to the grounds of them, but his reply is,—"I see all that you see, and I believe not." Before a man has acquired the mature judgment founded on a large experience, he has passed years in reading and observation, and it is long before he has the power of transferring his reading knowledge to the bedside with accuracy, of filling in the sketch he has made, of converting words into things. During this interval of years, with powers of observation correct, with industry, and with opportunity for acquiring knowledge, he has no greater enemy than his imagination, which will on occasions conjure up resemblances and suggest reasonings fatal to a correct diagnosis. Now there is no class of injury in which the diagnosis is more difficult, and on which opinions should be more hesitatingly formed and delivered, than those obscure affections of the brain and spinal cord consequent on railway injuries, and especially should we be wary in our judgment when we recollect how imperfect is our knowledge of the pathology of these structures, and how liable we are all to error, and especially when, making the past our future, we are compelled to confess that these bold opinions cannot stand the test of time. Here and there, at intervals, we come across an example of permanent injury in some great railway crash of years back; but, as a rule, such cases are not known to us, and a partial, or more commonly a complete recovery, places them beyond the range of medical observation.

When I listen in a court of law to the opinions of men younger and less experienced than myself, who boldly declare that the plaintiff, whose cause they have espoused, will never recover, that his case is hopeless, I cannot refrain from the involuntary expression of the thought, "the day will come when you will hesitate before giving so positive an opinion." From the moment the case opens in court the stream sets in against the defendants. Every word of evidence in one direction tells. The witnesses are rowing with the tide. Every word spoken answers two purposes; it tends both to uphold the cause of charity, and to the punishment of directors who are the natural enemies of their fellow-men, and who, in the style of language not very uncommonly employed, "mutilate their bodies by their reckless management, and then drive them into a court of law to obtain the miserable compensation which you, gentlemen, equally liable to injury with this unfortunate plaintiff, have now the power to award." If the case has been well got up, the question of damages closes with plaintiff's case. It is almost useless to contest the point. The cause is virtually decided, and it has lately not unfrequently occurred that the defendants' witnesses have not even been called to give evidence. This decision made by their leading counsel gives him the opportunity of addressing the jury without reply by the opponents, and in this address to the jury the whole weight of the defence depends upon him. The evidence against him is almost exclusively medical. He has to comment on, and to analyse this evidence, to expose its weakness, to damage its force. The case then passes into the hands of the judge who, profound in law, is unlearned in medicine, and whose charge to the jury tends in some slight degree to restore the balance; but the real knowledge fails him, and the jury handle the charge put before them after their own peculiar fashion, in obedience to their instincts and often to their prejudices. This may be law, but it is not justice. Neither is it justice to our profession that the treatment of diseases by homœopathy should come into our courts of law and stand hand in hand with that of our professional brethren. If homœopathy is a fiction and a simple exhibition of human folly, it is not just that a plaintiff, as in the above instance, should claim large damages who has systematically deprived himself during the entire term of his treatment of the services of our profession, and in whose case not a single remark deprecatory of the delusion was made in court, lest, as was hinted, "there might perchance be a homœopath sitting on the jury."

Much more might be said on the subject than I am inclined to write. I maintain that justice on these railway accidents cannot be reached in a court of law. They involve knotty and necessarily critical points in medical opinion, and by the driving and forcing system of a court, the medical witness is deprived of that deliberate judgment such cases especially demand at his hands. It is almost impossible to avoid a leaning, and especially is it pardonable on the part of a witness for the defendants who has listened with astonishment to what he deems the overcharged opinions of the plaintiff's witnesses.

For this evil there is a palpable cure. The injury the plaintiff has sustained should be investigated by impartial medical authorities. They should determine its real extent, and they alone. Railroad accidents will happen to the end of time, however great the penalties paid, and in despite of the utmost care that human skill can employ to prevent them. If any scheme could be adopted which will arrest the present evil of bringing medical men into courts of law, and throwing the weight of their personal feeling into the scale to exercise its influence on their opinion, it would be a great gain for the cause of justice; and whether the award be made by the court or not, the case, whenever depending on medical testimony, should be discussed candidly by both parties in the true spirit of a scientific investigation before coming into court. Between two parties of medical men called to give evidence a discrepancy of opinion prevails, the one party considering the plaintiff the subject of organic and permanent injury, the other that of temporary shock only, referring his eccentric symptoms to a disturbance of his nervous system. I will not stop to inquire by what mental machinery they have respectively arrived at their conclusions, or how it is that as a rule the testimony in behalf of the plaintiffs wears a more serious aspect than that of the witnesses for the defendants, and that the two parties almost invariably drag in opposite directions. I only state the fact. Can an appeal to a jury lessen this difficulty, or determine the question whether the injury be temporary or permanent? It might be supposed that the weight of experience would influence them, that the evidence of the surgeon who has witnessed twenty cases of injury was more valuable than that of the man who had witnessed but ten. But all medical witnesses are equally "men of experience," at least they are so represented by their respective counsel, therefore experience may be thrown aside as all but worthless. In private consultation the opinion of the more experienced man would obtain such deference as it may be proved to merit. In a court of law it may be rendered nugatory by the sneering comments of an opposing counsel. If justice be the end and object of the contention let us not expect it through the machinery of a trial by counsel and jury; or, if this machinery be indispensable, let their judgment wait on a carefully drawn up medical report, deliberately made prior to the trial. If contention between the medical authorities must exist, let their difficulties be settled out of court;

but, better still, place the case exclusively in the hands of medical assessors. If the verdict must turn upon the testimony of medical men, and it almost invariably does so, let us not be hampered, or our equanimity be disturbed, by examinations and cross-examinations in open court by men who are necessarily ignorant of the subject on which they examine, and whose very office consists in rendering our statements incomprehensible and, if possible, absurd.

I am, Sir, your obedient servant,

Mount-street, Grosvenor-square, July 29th, 1865. F. C. SKEY.

THE SHOREDITCH INFIRMARY: REPORT OF THE LANCET COMMISSION.

THE *Morning Advertiser* of Thursday last, August 3rd, contains an account of a meeting of the Shoreditch Board of Guardians. The Report of our Commission is handled very severely, and its statements denied. We are prepared, however, to maintain and establish their accuracy, and fully to reassert all that is therein said. After the Report was written, a visit was paid by two of the Commissioners, expressly to verify its accuracy; and we shall next week again notice this subject. The Report will render great public service, and its authority cannot be shaken by general denial.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 27th ult.:—

Cadle, James Frederick, Usk, Monmouthshire.
Drinkard, Wm. Beverley, Trinity-square, Southwark.
Hughes, Pringle, Middleton, Northumberland.
Nankivell, Herbert, Penzance.
Powles, Robert Coleridge, Ipswich.
Ransford, Gifford, Brompton, Middlesex.
Ring, Charles Gore, Clifton, near Bristol.
Seaman, Albert Baird, Isle of Wight.
Smith, Charles James Hardy, Kentish-town.
Tibbits, Herbert, Charterhouse-square.
Turner, Ellery, Beverley, Yorkshire.
Underhill, Francis William, Tipton, Staffordshire.
Watson, George Samuel, Hammersmith.
Wolston, Walter Thomas Prideaux, Brixham, Devon.
Wyllie, John, Edinburgh.

The following gentlemen were admitted Members on the 28th ult.:—

Coghlan, Edward Francis, Limerick.
Finden, Woodforde, Talbot-square, Hyde-park.
Greening, Fredk. Joseph, Bromsgrove, Worcestershire.
Morrison, John, Stirling, N.B.
Saunders, Thos. Jones, South Molton-st., Grosvenor-sq.
Todd, John, Mile-end-road.
Williamson, Ninian Alexander, Edinburgh.
Wood, Thomas Arthur, Isle of Man.

At the same meeting of the Court, the following gentlemen passed their examinations for Naval Surgeons. They had previously been admitted Members of the College, their diplomas bearing date respectively, June 13, 1856; Aug. 13, 1858; June 28, 1855; July 9, 1855.

Johnson, A. Borough, H.M.S. "Implacable," Devonport.
Mockridge, John, H.M.S. "Boscawen," Southampton.
Murphy, Alex., H.M.S. "Cumberland," Sheerness.
Ridings, Wm. Geo., Royal Marine Depôt, Deal.

It is stated that out of the 83 candidates who presented themselves at the pass examinations, no less than 17 were referred back to their studies for six months.

The following gentlemen, having passed the necessary examinations, received their diplomas in Dental Surgery at a meeting of the Board on the 2nd inst.:—

Bell, Robt. John, Cirencester-place, Regent's-park.
Sewill, Henry Ezekiel, Clifton-gardens, Maida-hill.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on the 27th ult:—

Batteson, John, Chesterfield.
Dunn, John Roberts, Warbleton, Sussex.
Husband, Henry Aubrey, Green Vale, Jamaica.
Popham, Henry Home, Hornsey-road, Holloway.
Steell, Frederick, Infirmary, Carlisle.
Willmot, Robert, Stratford-on-Avon.
Winn, Algernon William, Scarborough.
Wood, Thomas Arthur, 119, Gower-street.
Wynne, John Kendrick, Oswestry.

As an Assistant:—

Williams, Howell, Cardiff.

The following gentlemen also on the same day passed their first examination:—

Brookes, Robert Charles, Westminster Hospital.
Cant, William Edmund, St. George's Hospital.
Colquhoun, Frederick Stuart, London Hospital.
Cook, James Wood, Guy's Hospital.
Crowther, Edward L., Guy's Hospital.
De la Cour, George Francis, King's College, London.
Dyer, Thomas Birch, Guy's Hospital.
Lettis, Thomas, University College.
Mann, William Slingsby, Birmingham.
Spearman, George, Guy's Hospital.
Thomas, John Davies, University College.
Walters, James Hopkins, Guy's Hospital.
Warlow, Henry, Guy's Hospital.

COMMITTAL OF A SURGEON FOR MALAPRAXIS.—Mr. John Gerard, of Bardney in Lincolnshire, has been sentenced, at the late Lincolnshire summer assizes, to three months' imprisonment for malapraxis in a case of midwifery.

THE GRESHAM PROFESSORSHIP OF PHYSIC, rendered vacant by the death of Dr. Southey, has been conferred upon Dr. Henry Powell, of Exeter College, Oxford. He is a brother of the late Mr. Baden Powell.

CONGRESS OF STUDENTS.—The students in Law and Medicine of the University of Liege have invited the students of all Europe to attend a philanthropic congress for the discussion of various great social questions.

AN UNAWARDED PRIZE.—The Vice-Chancellor of the University of Oxford has announced to the governors of the Radcliffe Infirmary that an unawarded prize of £20 is placed at the disposal of the treasurer of that institution.

GRATUITY TO A SURGEON.—The committee of the Northampton Lunatic Asylum have presented a gratuity of £100 to Dr. Williams, the house-surgeon, in consideration of extra services rendered to the institution during a recent illness of Dr. Wing, the medical superintendent of the asylum. The expenses of an excursion to recruit his health have also been paid by the committee.

ARMY AND NAVY MEDICAL SERVICE.—Dr. Robert Bernard (1845) has been promoted to the rank of Deputy Inspector-General of Hospitals, and will proceed immediately to Hong-Kong to take charge of the Naval Medical Department in that settlement. Dr. Bernard's pay will amount to £500 per annum, whereas that of an officer of the same rank in the army would be £1000.

A PRIZE ON THE VACCINO-SYPHILITIC QUESTION.—The Medico-Chirurgical Society of Bologna (Italy) offers, for 1867, a prize of £20 on the following question: Determine by facts whether the vaccine virus may or may not transmit syphilis. Another prize (£40) is offered on the subjoined subject: Make known, and give its proper value to, the share which Italians have had in the advancement of surgery in the nineteenth century.

THE NEW FRENCH PHARMACOPŒIA.—The present French Codex, or Pharmacopœia, was issued in 1837, and is therefore considerably behind the progress of science. A new edition has, by desire of the authorities, been prepared by the professors of the Faculty and those of the School of Pharmacy. M. J. B. Baillière, the eminent bookseller and publisher, has the manuscript in hand, and the book is expected to come out soon. M. Baillière has paid £1000, as the highest bidder, for the privilege.

HERTFORD ASSIZES, July 14.—(Before Mr. Baron PIGOTT.)—Mr. James Quilter Rumball, a medical practitioner at Harpenden, was indicted for a misdemeanour in taking charge of a lunatic to board and lodge without having a licence or certificate.—The defendant, by the advice of his counsel, pleaded "Guilty," but protested that he had received the patient under a certificate of delirium tremens.—Mr. Baron Pigott, after taking time to consult his learned colleague in the commission, said that it was necessary to inflict a sentence, because it was of great importance it should be understood that the salutary provisions of the statute in this respect could not be disregarded with impunity. However, as it appeared that the defendant had no intention to violate the law, and had supposed that as the patient was only suffering

under an attack of delirium tremens it was not a case of lunacy within the Act, and as, moreover, it was represented that the defendant was not in circumstances to pay a large fine, he should only impose a fine of £20.

ANOTHER VICTIM OF THE RISKS CONNECTED WITH THE MEDICAL PROFESSION.—M. Bauchet, an extremely promising hospital surgeon, and assistant professor at the Faculty of Paris, has just died from the effects of a morbid poison, which gained access to the economy by an insignificant scratch on the finger, to which the deceased had paid no attention. He was well known as an indefatigable worker in the field of science, and died universally regretted. M. Bauchet was especially regarded and esteemed by M. Velpeau, and this veteran surgeon, deeply moved, paid at the funeral a warm tribute to his departed young friend.

TRIAL OF A SURGEON FOR ALLEGED POISONING.—Mr. Charles Gordon Sprague, the surgeon who was charged with attempting to poison his wife and father and mother-in-law at Ashburton, was tried at the Devon assizes on Tuesday. The three persons said to have been poisoned suffered severely after eating a rabbit and steak pie into which it was suggested the prisoner had put atropine. After a trial which lasted for some hours, the prisoner was found not guilty. The evidence altogether was incomplete and unsatisfactory. There was no direct proof that poison had been introduced into the pie, and even if there had been, no evidence was brought forward that the prisoner had, or could have had, any hand in the matter. The judge thought the case too weak to substantiate the charge, and in this prosecuting counsel acquiesced. The judge paid a well-merited compliment to the medical witnesses for the manner in which they had given their evidence.

THE ILL-LUCK OF A DOCTOR.—The Mexican Loan in Paris was connected with a prize of £20,000, which has been won by a M. Gigre. It would appear that the fortunate winner, after trying in vain at the *comptoir d'escompte*, to get through the crowd, went to a branch-office, and there waited his turn, when a well-known medical man, who was well acquainted with the clerks, insisted on being attended to before M. Gigre, though he had come after him. M. Gigre resisted this, but, whilst the discussion was going on, the officials managed to give the doctor his ten bonds. M. Gigre was then obliged to take the two next bonds, one of which gained the prize. Had our professional brother been less impatient, he would have secured the £20,000.

MEDICAL APPOINTMENTS.

W. BALE, M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Heaton-Norris District of the Stockport Union, Cheshire, vice W. Rayner, M.D., resigned.

J. H. BARNES, M.R.C.S.E., has been appointed Consulting Surgeon to the Liverpool Workhouse Hospital, vice Mr. T. W. Fletcher, resigned.

R. F. COOK, M.B., has been appointed Medical Officer for the West Gateshead District of the Gateshead Union, Durham (being part of the North Gateshead District, which was divided into two—namely, East and West, upon the resignation of R. W. Wilson, M.D.); Dr. Cook has also been appointed Medical Officer to the Union Workhouse.

G. DOUGLASS, M.D., has been appointed Medical Officer for the East Gateshead District of the Gateshead Union.

S. GILES, M.D., has been appointed Honorary Medical Officer to the Royal Kent Dispensary.

N. J. HAYDON, M.D., L.R.C.P., of Bovey-Tracey, Devon, has been appointed Certifying Surgeon under the Factories Act.

N. T. J. HAYDON, M.R.C.S., has been appointed House-Surgeon to St. Mary's Hospital, London.

Mr. H. C. LAWRENCE has been appointed House-Surgeon to the Coventry and Warwickshire Hospital, vice Mr. F. Iliffe, resigned.

A. W. LEACHMAN, M.D., has been appointed Medical Officer and Public Vaccinator for District No. 3 of the Petersfield Union, vice W. Peskett, M.R.C.S.E., resigned.

W. LOCKWOOD, M.R.C.S.E., has been appointed Medical Officer for Districts No. 3A and No. 3B of the Langport Union, Somersetshire, vice S. S. Larcombe, M.R.C.S.E., and T. Plowman, M.R.C.S.E.

W. MACINDOE, M.D., has been elected Medical Officer and Public Vaccinator for the Parishes of Dryfsdale, Applegarth, and St. Mungo, Dumfriesshire, vice G. C. Wilson, L.F.P. & S. Glas., deceased.

F. MASON, F.R.C.S., has been elected President of the Medical Society of King's College, London, for the Session 1865-66.

J. PADDON, M.B., has been elected Physician to the Swansea Infirmary, vice T. Williams, M.D., deceased.

J. TAYLOR, L.F.P. & S. Glas., has been elected Medical Officer and Public Vaccinator for the Hornton District of the Banbury Union, Oxfordshire, vice J. H. M'Greal, L.R.C.P.Ed., resigned.

D. H. THOMAS, M.R.C.S.E., has been appointed Surgeon to the Police, Swansea, vice T. A. Essery, F.R.C.S.E., deceased.

J. C. THOMSON, M.D., has been appointed Medical Officer for the Thornley District of the Easington Union, Durham, vice J. Marr, L.R.C.P.Ed., resigned.

W. A. STUART, M.R.C.S.E., has been appointed Physician's Assistant to University College Hospital.

MILITARY AND NAVAL MEDICAL APPOINTMENTS.

M. BURTON, M.D., Staff Surgeon R.N., has been appointed to the "Edgar."

J. H. CHELY, F.R.C.S.E., Hon. Assist.-Surgeon 4th Buckinghamshire Rifle Volunteer Corps, has been appointed Surgeon to the 1st Administrative Batt. of Buckinghamshire Rifle Volunteers.

G. V. COOPER, M.R.C.S.E., has been appointed Hon. Assist.-Surgeon to the 15th Wiltshire Rifle Volunteer Corps.

R. HENRY, L.R.C.S.I., Assist.-Surgeon in the Royal Artillery, has been appointed Staff Assist.-Surg. Army, vice J. Burke, L.R.C.P.Ed., deceased.

W. E. HYDE, M.R.C.S.E., has been appointed Hon. Assist.-Surg. to the 6th Herefordshire Rifle Volunteer Corps, vice James, resigned.

H. M. MACBETH, L.R.C.S.I., Staff Assist.-Surg. Army, has been appointed Assist.-Surg. in the Royal Artillery, vice R. D. Burn, M.D., placed upon half-pay.

J. M'CULLY, M.D., Staff Assist.-Surgeon Army, has been appointed Assist.-Surgeon to the 105th Foot, vice T. C. Morgan, appointed to the Staff.

G. V. M'DONOGH, M.D., Surgeon R.N., has been appointed to the "Gannet."

P. MARTYN, M.D., Surgeon R.N., has been appointed to the "Winchester."

T. C. MORGAN, L.K.Q.C.P.I., Assist.-Surg. 105th Foot, has been appointed Staff Assist.-Surgeon, vice M'Cully, M.D., appointed to the 105th Foot.

Mr. C. PRIDHAM has been appointed Hon. Assist.-Surg. to the 1st Devonshire Light Horse Volunteer Cavalry, vice Shaw, resigned.

H. RICKARD, L.R.C.P.Ed., Assist.-Surgeon R.N., has been appointed to the "Wellesley" for temporary service in Chatham Dockyard.

C. I. SMITH, L.R.C.P.L., Deputy Inspector-Gen. of Hospitals Madras Establishment, has been promoted to Inspector-Gen. of Hospitals.

J. WARREN, M.R.C.S.E., Assist.-Surgeon from the 59th Foot, has been appointed Assist.-Surg. to the 1st Dragoons, vice Mulock, promoted on the Staff.

Births, Marriages, and Deaths.

BIRTHS.

On the 25th of April, at Wynyard-square, Sydney, N.S.W., the wife of Edwin Chisholm, M.R.C.S.E., prematurely, of a daughter, who survived but a few hours.

On the 18th ult., at India-street, Edinburgh, the wife of Dr. Richter, of a son.

On the 22nd ult., at Wormwood House, Manningtree, Essex, the wife of J. W. Cook, M.D., of a daughter.

On the 22nd ult., at Ryde, Isle of Wight, the wife of Dr. Turner, of a son.

On the 22nd ult., at Whitehaven, the wife of Thos. Jackson, M.R.C.S.E., of a daughter.

On the 25th ult., at Mecklenburgh-square, the wife of S. Hill, M.D., of a son.

On the 25th ult., at Mere, Wiltshire, the wife of W. N. Marshall, M.R.C.S.E., of a daughter.

On the 26th ult., at Clifton-road, St. John's-wood, the wife of Dr. Alex. E. Mackay, Deputy Inspector-Gen. of Hospitals and Fleets, of a son.

On the 26th ult., at Myddelton-square, the wife of A. Buchanan, M.B., of a daughter.

On the 27th ult., at Caversham-road, Kentish-town, the wife of Dr. M'Gowan, of a son.

On the 27th ult., at Neston, Cheshire, the wife of D. Russell, M.D., of a son.

MARRIAGES.

On the 14th of June, at Charles Church, Plymouth, Nath. Hellings Lloyd, L.R.C.P.L., of Truro, eldest son of the late Rev. J. D. Lloyd, Rector of Clare Portion, Tiverton, to Louisa Mary, only child of the late John Arnold, Esq., of Buckland, North Devon.

On the 27th ult., at St. John's Church, Higher Broughton, Manchester, W. C. Low, M.D., of Martley, Worcestershire, to Martha, eldest daughter of Colin Mather, Esq., of Willow-bank, Lower Broughton, Manchester.

On the 27th ult., at Newton-place, Glasgow, Leonard Keatley Yelf, M.D., of Moreton-in-Marsh, Gloucestershire, to Jane Adam, second daughter of John Burnet, Esq., Writer, of Glasgow.—No Cards.

On the 27th ult., at Kipping Chapel, Thornton, near Bradford, Yorkshire, Wm. Charteris, L.R.C.P.Ed., L.R.C.S.Ed., to Eliza, youngest daughter of Joseph Corrie, Surgeon, of Thornton.

On the 27th ult., at the Wesleyan Chapel, Summerslat, Thos. Clifford Davies, M.D., to Alice Eliza, widow of the late J. O. Openshaw, Esq., of Klinolas, Bury, Lancashire.

On the 1st inst., at the Parish Church of Halifax, Francis Edwin Macaulay, M.R.C.S.E., to Agnes Mary Jane, second daughter of the late Joseph Fawthrope, Surgeon, both of Queensbury.

DEATHS.

On the 27th of April, at Ballarat, R. J. Hobson, M.D.

On the 13th of May, at Camperdown, Geelong, Australia, G. Fulton, Surgeon.

On the 2nd of June, at Dalhousie-in-the-Hills, India, J. H. Butler, F.R.C.S.E., Deputy Inspector-General of Hospitals Indian Service.

On the 19th ult., at Redruth, Cornwall, F. J. L. Woolf, Surgeon, aged 25.

On the 21st ult., John Strange, M.D., of Park-crescent, Brighton, retired Surgeon R.N., aged 86.

On the 22nd ult., Thos. Bireley, M.R.C.S.E., of Alnwick, Northumberland, aged 53.

On the 24th ult., at the Great Western Hotel, Paddington, R. H. Kennedy, late Physician-General Bombay Army.

On the 25th ult., S. White, M.R.C.S.E., of Sherborne, Dorsetshire, aged 70.

On the 25th ult., at Fettes-row, Edinburgh, James Duncan, M.D., of Ceylon.

On the 27th ult., suddenly, at Banbury, Caroline, the wife of R. Grimbly, M.R.C.S., aged 50.

On the 28th ult., at St. Bees, R. Cammack, M.R.C.S.E., of Lincoln, aged 58.

On the 28th ult., Joseph Doyle, F.R.C.S.I., of Blessington-street, Dublin, aged 84.

On the 30th ult., H. W. Best, M.R.C.S.E., of Thetford, Norfolk, aged 58.

On the 31st ult., at St. James-street, Nottingham, Emma Tooke, wife of Thomas Burnie, Surgeon.

To Correspondents.

FEES TO GOVERNMENT LIFE ASSURANCE MEDICAL REFEREES.

Dr. G. P. May and others.—The Government Life Assurance and Annuity measure has now been in operation three months, and we hear that it is steadily progressing in all parts of the country. Several communications have reached us on the subject of fees offered by the Postmaster-General for the medical examination of parties proposing to assure. Some of our correspondents complain of the small amount offered; more than one of these letters have been inserted in our columns. It is next to impossible to give universal satisfaction; but from the numerous applications for the appointments, and many of which we hear are endorsed by recommendations of influential members of Parliament (and in large towns the number far exceeds the requirements of the place), we suspect the greater part of the profession agree with our original view in believing that the Government desired to act in a liberal spirit towards them. They have thus acted wisely in accepting without any hesitation the fees offered. It is gratifying to announce that the majority of proposals for assurance are for sums above £100, thus making the examination fee more frequently 5s. than 2s. 6d. Considering the extraordinary success of Post-office Savings Banks, and the wide field now opened for the development of a new class of life assurance business in connexion with them in all parts of the kingdom, and that the practice of life and health assurance must inevitably become more general with operatives and persons of limited income, it cannot but be expected that a large sum in the gross will be paid to medical men for their services. It has been asserted that the fees are not remunerative for the time and trouble of filling up the Government form of examination, and that the questions are both too numerous and too complicated; but, from the experience of a medical referee, it may be stated that only occasional instances occur where the time exceeds twenty minutes in filling up and signing the report. Cases for hesitation and such as demand a more prolonged and scrutinizing examination, or that ought to be refused, are but in small proportion, and not difficult to recognise. Many of the questions—for example, the one instanced by our correspondent, the delicate question of ascertaining pregnancy or the existence of cancer in the case of females—must be answered simply by the negative or affirmative statement of the proposer. The existence of hæmorrhoids, hernia, or stricture, is in like manner mainly to be trusted to the statement of the party proposing, who is bound not to perjure himself, or risk the forfeiture of his policy by wilful concealment. Again, the normal condition of the organs of respiration and circulation may be tested without difficulty by an experienced auscultator in a few minutes. Examinations for life assurance purposes, and the granting certificates to invalids, under many circumstances beneficial to themselves or to institutions in which they are interested, will ultimately be a source of revenue to the profession, which it has hitherto not fully realized. It is most desirable that a general agreement be entered into that these certificates should be paid for, either by a salaried officer acting for the protection of the institution, or by the person for whose benefit the certificate is granted. The Government Life Assurance scheme, of paying 2s. 6d. and 5s. fees for medical services, offers an example that ought to be followed by every Friendly and Benefit Society in the kingdom. The valuable services of medical men in granting certificates are now too frequently performed gratuitously in connexion with their other duties, whereas they ought to form a most legitimate source of income to members of the profession.

Senior.—The rules of professional etiquette are quite in agreement with the behaviour of our correspondent under the circumstances stated.

THE MEDICAL DIRECTORIES.

To the Editor of THE LANCET.

SIR,—As the Editors of the Medical Directories have just issued their annual circular, I would wish to call the attention of the profession to the falling off in the amount of useful information contained in the present work as compared with that of last year, or even the year before. I do not wish to enter into any minute criticism; but would merely point out the broad fact, that whereas the Directory for 1864 contains 1024 pages, that for 1865, though said to contain additional information, has only 906 pages! Anyone who will take the trouble to compare the account of the educational requirements &c. of the University of London given in the work of 1864 with that in 1865 will see one means by which the Editors have been enabled to curtail the book, and I think few will say such curtailment is an improvement.

I remain, Sir, yours, &c.,

Liverpool, August 2nd, 1865. P. T.

Dr. J. N. Williamson.—The only public establishment where imbeciles are trained and educated in England is that at Earlswood. There is not, we think, any similar institution in Scotland. The late Dr. Foreman, of Church Hill House, Brighton, had a private institution of the kind. He, however, died quite recently, and we have not heard anything of his establishment.

A GOOD EXAMPLE.

To the Editor of THE LANCET.

SIR,—The Guardians of the Kidderminster Union have just signified their desire to supply quinine and cod-liver oil to paupers requiring those remedies. I feel it a duty to make known to you this mark of their liberality as worthy of more extensive imitation.—Yours obediently,

SAMUEL STRETTON,

Kidderminster, July 29th, 1865. Medical Officer of Union.

ORGANIC MATTER IN WATER.

M.D.—The presence of organic matter in water and its amount are usually determined by evaporating, in a platinum dish, a quart of the water to absolute dryness at a temperature of about 300°, weighing the dish and contents, burning off the organic and other volatile matter, and again weighing as soon as the dish has become cold. The loss of weight indicates the quantity of organic matter present. An approximation to the amount of oxidizable organic matter contained in water may be arrived at by the quantity of a weak solution of permanganate of potash decolorized by the water experimented upon. It is well to test a sample of pure water at the same time for the sake of comparison.

L.R.C.P. Lond.—Next week.

Engel.—1. Fashion, we suspect, has done more for the bromide than anything else.—2. The dose of the arseniate of iron should not be more than 1-30th of a grain to begin with.

Mr. C. W. Iliffe.—There is no rule applicable to all cases. The new-comer usually makes the first advance.

Mr. E. Adams, (Daventry.)—H. K. Lewis, 15, Gower-street North; R. Kimpton, 31, Wardour-street.

M.D.—Witty, but not quite to the point.

A. B. C.—Bubo occurs more frequently in men than in women. In the former it more often follows sores on the prepuce and frænum; in the latter, ulceration of the orifice of the urethra and of the commissure.

EFFECTS OF IODIDE OF POTASSIUM.

To the Editor of THE LANCET.

SIR,—I must again crave your indulgence for a brief reply to Mr. Atkinson's letter in your impression of July 22nd with reference to a few observations of mine on the above subject.

In justice to myself, permit me to premise that his *diagnosis* of my character is fortunately as erroneous as I still maintain are his views on the question at issue, and, with a recent "contribution" on another subject, corroborate a strong conviction entertained by me as to the singular fertility of that gentleman's imagination. But what of the proof, shall I call it, adduced by him that "erysipelas of the head and neck," we shall say, is even occasionally consequent on the administration of iodide of potassium? Your readers are informed that in the hospital with which he is connected there have arisen from October last 9 cases of erysipelas and 22 of sore-throat. Of these 8 cases, *four* had been "previously taking iodide of potassium." At what interval we are not informed, and whether anything else we are left in equal doubt. The remaining four, it would appear, had not been taking this salt; but by some occult process of reasoning the erysipelas of the former *four* is ascribed to iodide of potassium! and that of the remaining four to nothing at all. Let me suggest whether the same reasoning would not bear out the hypothesis that the malady of the latter was due to lunar influences or to sudden change in temperature of the Gulf-stream! With febrile disturbance, headache, &c., I take nothing to do, as I have not challenged their occurrence, save remarking that there is nothing to indicate that they were "probably the symptoms of on-coming erysipelas," which our friend happily so early and unfortunately so frequently recognises. With that I have done. But now sore-throat is added to the category of "bad results" due to this surely potent and insidious agent, of which I was wont to entertain a better opinion, believing it to be that of most medical men, at all events beyond the confines of Rochester. Of 22 cases, then, of sore-throat which arose in this ill-fated establishment, 15 had previously been taking iodide of potassium, and perhaps very properly too. Mr. Atkinson does not inform us whether these might not have borne some resemblance to syphilitic sore-throat, or some other more likely cause, than *iodide of potassium sore-throat*, which I shall be glad to look upon as an offensive intruder on an already cumbrous nosology. Milne, he observes, in his "Manual of Materia Medica,"—a book which has not yet penetrated into this *terra incognita*,—says that "if pushed too far, disturbed digestion is an exceedingly common result;" and, *ergo*, your sapient correspondent adds, "if so, no doubt occasionally sore-throat and erysipelas!" I wonder if Milne would endorse *that* proposition.

Now as to the administration of sal volatile and tartar emetic with iodide of potassium, I beg the interested reader to refer to Mr. Atkinson's letter in THE LANCET of July 1st, and, if words have any meaning, judge for himself what sal volatile and tartar emetic *given in conjunction* with iodide of potassium implies. The reason we are told why tartar emetic is such a valuable adjunct is, that it quiets the action of the heart, lessens the circulation, and, *mirabile dictu!* "*gives more time for the iodide to act*"! What, in the name of wonder, would sal volatile do under such circumstances? If true to its quondam reputation, it should send this said iodide literally to the "round about and double quick."

One word as to the dilution which I recommend, as taught by my worthy teacher, Prof. Easton. I believe that, given in large doses, concentrated iodide of potassium might and does act as an irritant, and, moreover, I do not believe that it is removed by the kidneys in quantity corresponding to increase of dilution.

I fail to discover any analogy whatever between the compounds to which Mr. Atkinson refers me and the unique mixture I understood him to prescribe. Vaccination, the use of arsenic, and quinine, in all of which I have great faith, are never, in Scotland, followed by anything so alarming as erysipelas of the head and neck, proper precautions being taken.

I am sensible, Mr. Editor, that I have already encroached too much on your space. Just permit me, in conclusion, to observe that, prone to discovery, I believe Mr. Atkinson to have been inveigled by that stumbling-block of ambitious juniors, the *post hoc propter hoc* argument. I leave him now in undisputed possession of the field, if he will, sincerely wishing him better luck of his next discovery—a consummation, for his own sake, devoutly to be wished.

Your obedient servant,

Oban, July 24th, 1865. D. C. BLACK, M.D.

To the Editor of THE LANCET.

SIR,—With respect to the effects of ordinary doses of the iodide of potassium in the treatment of secondary syphilis, I have noticed of late the frequent occurrence of coryza, erysipelas, conjunctivitis, and tiresome inflammation of the throat following the administration of this drug; so much so that I have in many cases had recourse to the bromide of potassium, as less likely to be followed by such unpleasant results.

I am, Sir, yours obediently,

Mansfield, Notts, July 26th, 1865. THOS. GODFREY, M.R.C.S.

Chirurgus.—The Coroner must issue a summons in accordance with the Medical Witnesses Act, and pay the person summoned the fee of one or two guineas according to whether he examines the body or not. As the deceased did not die in the hospital, the house-surgeon, if qualified, must be paid for giving evidence.

Forensicus may consult the fourth volume of "Casper's Handbook," recently issued by the New Sydenham Society.

Student, (Radcliffe.)—The questions refer to a subject which has neither professional nor scientific interest.

W. W. should wait his turn for a house-surgeoncy at his own hospital.

CHOLERA.

To the Editor of THE LANCET.

SIR,—According to a notice in your journal of the 15th July, headed "Cholera in Gateshead," it appears either that the course of disease in that town is different from what it is in other places, or that the Officer of Health is ignorant of the laws which regulate epidemics. That gentleman's unhesitating declaration, "that there has not been a case of Asiatic cholera in this town since the last visitation in 1853," is so extraordinary, and so opposed to medical experience in other parts of the country, that I trust you will permit me to direct the attention of your readers to the subject.

It is a well-established fact, and may be regarded as a positive rule, that a disease which has visited a locality as an epidemic, is liable to recur afterwards in the same place in the sporadic form. In this manner maladies previously unknown become naturalized, and morbid affections supposed to be peculiar and limited to particular spots extend their ravages to other regions. Thus in parts where Asiatic cholera introduced itself as an epidemic, it has occasionally occurred ever since. The symptoms and progress of the disease have been precisely the same, and the only difference perceptible is, that the cases are few, single and scattered, instead of being numerous and grouped, and that the mortality has been slight instead of severe. Indeed, considering the violence of the seizures, the fatality has been very small. The characters of the disease have been distinct and strongly marked, and such as no one who has had any experience in the treatment of the Oriental malady could mistake for those of the ordinary congestive cholera. No skilled observer could confound this form of the English disease, although it is accompanied by coldness, cramps, collapse, and serous evacuations, with its foreign namesake. The features of the two morbid affections certainly bear some resemblance to each other; but the essential difference between them is easily recognised by a medical practitioner who is well acquainted with both. At Bedford, cases of Asiatic cholera have been met with in the sporadic form almost every year since its first visitation in 1832. In some seasons they have been few, and in others more numerous; but in no instance have they assumed, either in respect to numbers or fatality, anything like an epidemic character.

It is now nearly two centuries since plague was epidemic in England; but sporadic cases of this disease are occasionally observed at the present day. I have seen several such, and so have many others. The symptoms were unmistakable, and had they occurred in Turkey or even in this country when this pestilence was raging epidemically, they would have been considered cases of plague. This disease, however, has been so dreaded, and in the epidemic form is so formidable, that the true name has been tabooed, and malignant typhus has been substituted for it. Plague, like all other maladies, is much less fatal in the sporadic than in the epidemic states; but this difference has been ignored both by the profession and the laity. Scientific truth has been sacrificed to popular prejudice, and error has been sanctioned by authority to the great detriment of humanity. If the public mind were correctly instructed in the difference between epidemic, endemic, and sporadic diseases, the terror excited by the occurrence of diseases in the sporadic form would be allayed, unnecessary preventive measures would be avoided, and much expense saved, and the patients afflicted with them would stand a fairer chance of recovery.

I am, Sir, yours faithfully,
Bedford, July 28th, 1865. WILLIAM BLOWER, M.R.C.S.

C. C.—With proper management the common sulphur ointment will be found quite equal to the emergencies of any such case, provided a very rapid cure be not urgent.

Hygeist.—Swimming is of all exercises that which brings most muscles into equable action at the same time.

B. H. H.—It is quite impossible to give in this place full answers to the questions propounded. All the information can be obtained by reference to the Students' Number of THE LANCET.

THE CARPET-BEATING AT THE STRAND UNION HOUSE.

To the Editor of The Times.

SIR,—Having read your able article on the treatment of the sick poor in workhouses, and your deservedly severe remarks on the carpet-beating carried on in immediate proximity to the wards for the sick infirm and dying at the Strand Union, I gave notice of a motion for last evening to the effect that the subject should be referred to the Medical Officer of Health of the District, and also to the surgeon to the house, with a view of learning from them whether the practice was deleterious to health or not; but I regret to say that my motion was derided and jeered at, and, beyond my seconder, Mr. Storr, of King-street, Covent-garden, no one supported me.

I have long known that this custom has been a source of discomfort, if not something worse, to the sick inmates of the house, and as far as I have been able I have striven to abolish it. Last May I proposed a motion to do away with it wholly; then I stood alone.

The medical officer of the house has repeatedly stated that, in his opinion, it was a source of great injury to the poor; that it could not be defended; that it poisoned the healthy and disturbed the comfort and quiet of the sick and dying. But it is all of no use; the £800 a year earned thereby covers everything.

I now leave the matter in the hands of the public, hereby acquitting myself and my single colleague of further complicity in this evil.

I am, Sir, yours obediently,
J. F. HEDGCOCK,
Guardian of the Poor for St. Ann's District of the Strand Union.

*** Mr. Hedgcock is entitled to the thanks of the public and the poor of the Strand Union for his praiseworthy efforts in the cause of humanity.—ED. L.

L.A.H.—Under exceptional circumstances; but the L.A.H. Dublin is not recognised in England as a *medical* qualification. The Poor-law Board, as a rule, requires the candidate to possess a medical and surgical qualification; but in certain cases this rule is departed from.

Amor Veritas.—Mistakes and misstatements are almost unavoidable in such a compilation. The communication should be addressed to the editors of the work.

A Fellow R.C.S. should look about him a short time previous to the next opportunity he may have for voting.

X. Y. Z. will find the information he requires in any of the standard works on Skin Diseases.

L.R.C.P. (Margate) is justified in assuming the title.

CASE OF DEFORMITY.

To the Editor of THE LANCET.

SIR,—As you are reporting in the columns of your journal several cases of deformity in children, the following perhaps may prove of some interest:—

A little boy, aged six, who is at present in this hospital, has the radius and thumb of the left arm entirely deficient. The forearm is very short and curved, whilst the hand is large and unusually long. The two, therefore (i. e., the hand and forearm), are very nearly equal in length, and present a most peculiar appearance. The styloid process projects on the inner side of the wrist, and the hand is capable of being moved at exactly right angles to the arm. In this case also the urethra is abnormally small.

I am, Sir, yours obediently,
F. P. ATKINSON, M.B., &c.
St. Bartholomew's Hospital, Rochester, July 31st, 1865.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. W. R. Lane; Dr. Fleming; Dr. Atkinson; Mr. Blower, Bedford; Mr. Land; Mr. Ball; Mr. Stretton, Kidderminster; Mr. Selwood, Birkenhead; Capt. Tredcroft; Mr. Lea; Mr. Mellon; Mr. Mulliner; Dr. Haydon; Mr. Harper, Leith; Mr. Maure; Dr. Low, Manchester; Mr. Wotherspoon; Dr. Davies, Bury; Mr. Crook; Dr. Barder, Clifton; Mr. Grimbly, Banbury; Mr. O. Thomas; Mr. S. Jones; Mr. Davy; Dr. Williamson, Maryport; Mr. Rawson, Londonderry; Dr. Giles; Messrs. Ellis, Ruthin; Dr. Harris, Camborne; Mr. Scott, Hanley; Mr. Harvey; Mr. Balbirnie; Mr. Corbett; Mr. Needes; Mr. Hicks, Plymouth; Mr. Barnes, Liverpool; Mr. J. Taylor, Hornton; Mr. Macaulay, Queensbury; Mr. Dunn (with enclosure); Mr. Burnie, Nottingham; Mr. Lawrence, Coventry; Mr. Morris; Mr. Evans; Mr. Davies, Llanybyther; Mr. Charteris, Thornton; Mr. Werry; Mr. O'Brien, Landport; Mr. Mason; Dr. Kitchener; Mr. Crockett; Mr. Lloyd, Truro; Mr. Hill; Mr. Trenery; Mr. Farrar; Mr. Crofts; Mr. E. Murray; Mr. R. Ellis; Mr. Müller; Mr. Philpot, Presteign (with enclosure); Dr. Smallman, Willingham; Dr. Cordwent; Mr. Adams, Daventry; S. S. (with enclosure); Physiologist; N. W.; M.D., Windermere; Informatio; J. J.; L.R.C.P.; W. R.; Mariner; The London Sanitary Company; Amor Veritas; Ignoramus; Chirurgus; L.A.H. Dublin; X. Y. Z.; R. W.; Honestas; W. J. P.; Students, Radcliffe; B. H. H.; K. G. (with enclosure); R. A.; R. H. B. (with enclosure); M.D.; P. T.; L.R.C.P. Lond.; B. E.; &c. &c.

THE *Money Market Review*, the *British Press* (Jersey), and the *North Wales Chronicle* have been received.

Medical Diary of the Week.

Monday, Aug. 7.

ST. MARK'S HOSPITAL FOR FISTULA AND OTHER DISEASES OF THE RECTUM.—Operations, 1½ P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, Aug. 8.

GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.

Wednesday, Aug. 9.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARK'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.

Thursday, Aug. 10.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
LONDON SURGICAL HOME.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

Friday, Aug. 11.

WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.

Saturday, Aug. 12.

ST. THOMAS'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.